



## INTRODUCTION

### E & E Magnetic Products Limited

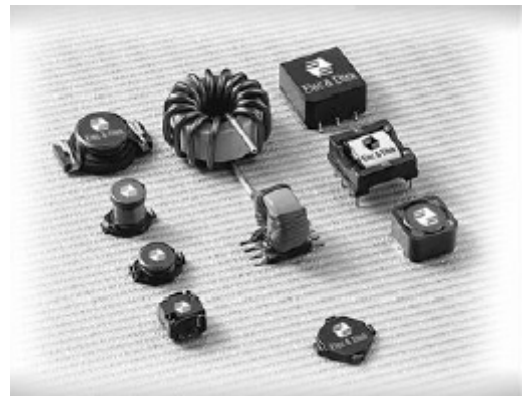
E & E Magnetic Products Limited (EEMPL) has been positioned as a major supplier of high quality magnetic related products. With the worldwide presence of our engineering teams, we design and manufacture a wide range of products such as magnetic components, magnetic integrated connectors, and electronic modules. Products are widely used in computing, networking, telecommunications, industrial, medical, automotive and consumer electronic applications.

As one of our key factors to success, EEMPL has established a far-reaching sales and marketing network which well covers our customers located worldwide. In addition to our sales representatives and distributors, we have direct sales support offices in USA, Europe, Hong Kong and China.

In order to fulfill our mission of providing the best value to our customers, EEMPL is committed to develop cutting-edge technology with our high-tech business partners, uphold stringent product quality and compliances with international industrial standards, provide on time deliveries and offer our products at most competitive pricings.

### Power Inductors

A wide range of power transformers, shielded and unshielded inductors, flat-wire inductors, bead inductors and common-mode chokes in through-hole, surface-mounted, low profile with various features such as the low DCR or core loss, high current saturation, high operating temperature are available from EEMPL for use in the power management applications of the high-speed servers, workstations, computers, portable devices, point of load systems, LED lighting controls, and automotive.



All components meet international safety standards and are available with through-hole, surface-mount and other packages. To address different customer's requirement, specific design solutions are also available.



## DRUM CORE INDUCTORS

### SMT Unshielded Drum Core Inductors

	L / W / H (in.) Max	Doc#	Page
UIS1704X Series .....	.260/.217/.039 .....	PI101 .....	12
UISMP2A Series .....	.295/.205/.071 .....	PI109 .....	14
UIH3C Series .....	.138/.106/.087 .....	PI044 .....	16
UIH4NX Series .....	.189/.134/.110 .....	PI064 .....	18
UIS1608 Series .....	.260/.175/.115 .....	PI015 .....	22
UIS3308 Series .....	.510/.370/.118 .....	PI002 .....	24
UISCD43 Series .....	.177/.157/.126 .....	PI009 .....	26
UISCD104 Series .....	.394/.354/.157 .....	PI021 .....	28
UISCD54 Series .....	.147/.204/.177 .....	PI010 .....	30
UIH5057 Series .....	.224/.197/.185 .....	PI081 .....	32
UIS1813HC Series .....	.350/.240/.197 .....	PI029 .....	34
UISP0648 Series .....	.515/.515/.197 .....	PI091 .....	36
UIS3316 Series .....	.510/.370/.215 .....	PI001 .....	38
UISCD75 Series .....	.319/.287/.217 .....	PI011 .....	40
UIH612X Series .....	.395/.315/.224 .....	PI201 .....	42
UISCD105 Series .....	.410/.370/.229 .....	PI018 .....	46
UIS3316HC Series .....	.520/.390/.250 .....	PI028 .....	48
UIS3316T Series .....	.520/.390/.250 .....	PI202 .....	50
UIS0403X Series .....	.350/.265/.255 .....	PI203 .....	52
UIS5022 Series .....	.730/.600/.280 .....	PI003 .....	54
UIS5010HC Series .....	.730/.600/.315 .....	PI107 .....	56
UIS5022HC Series .....	.880/.640/.315 .....	PI014 .....	58
UISPB2020 Series .....	.940/.820/.400 .....	PI100 .....	60
UIS1311 Series .....	.510/.370/.445 .....	PI204 .....	62
UIS3340 Series .....	.510/.370/.450 .....	PI005 .....	64
UIS5015 Series .....	.730/.600/.450 .....	PI146 .....	66
UIS5005 Series .....	.880/.640/.472 .....	PI150 .....	68
UISPI1916X Series .....	.750/.620/.650 .....	PI072 .....	70



Data Sheets

**THT Unshielded Drum Core Inductors**

	L / W / H (in.) Max	Doc#	Page
UIT1126X Series.....	.354/.433/1.02 .....	PI207 .....	74
UIT494ZX Series .....	.394/.394/.394 .....	PI205 .....	76
UIT622 Series .....	.343/.343/.433 .....	PI096 .....	78
UIT824ZX Series .....	.413/.413/.610 .....	PI206 .....	80



Data Sheets

**SMT Shielded Drum Core Inductors**

	L / W / H (in.) Max	Doc#	Page
SIS5210 Series .....	.205/.205/.039 .....	PI211.....	84
SIS2D11X Series .....	.126/.126/.047 .....	PI104.....	86
SISSD12 Series .....	.205/.205/.047 .....	PI070.....	88
SIS4040ZX Series.....	.157/.157/.071 .....	PI210.....	90
SISSD18 Series .....	.205/.205/.071 .....	PI043.....	94
SIS2D18HPX Series .....	.126/.126/.079 .....	PI105.....	96
SIS4D18 Series.....	.197/.197/.079 .....	PI051.....	98
SISSD20 Series.....	.205/.205/.079 .....	PI103.....	100
SIS5D18 Series.....	.236/.236/.079 .....	PI052.....	102
SISSD25 Series .....	.205/.205/.098 .....	PI057.....	104
SIS5D23 Series.....	.236/.236/.098 .....	PI085.....	106
SIS1008PSX Series.....	.150/.150/.108 .....	PI208.....	108
SISP1174X Series.....	.265/.175/.110 .....	PI216.....	110
SISDS1608BX Series .....	.260/.175/.115 .....	PI083.....	112
SISDS1608X Series .....	.260/.175/.115 .....	PI082.....	114
SISDT1608X Series.....	.260/.175/.115 .....	PI019.....	116
SIS3D28LDX Series .....	.157/.157/.118 .....	PI106.....	118
SIS4D28 Series.....	.197/.197/.118 .....	PI092.....	120
SIS5D28 Series.....	.236/.236/.118 .....	PI058.....	122
SIS6360 Series .....	.248/.244/.118 .....	PI020.....	124
SIS5D28R Series.....	.244/.248/.118 .....	PI090.....	126
SIS6230 Series .....	.272/.256/.118 .....	PI212.....	128
SIS6D28 Series.....	.276/.276/.118 .....	PI046.....	130
SIS916X Series.....	.248/.244/.138 .....	PI033.....	132
SIS7535X Series .....	.297/.297/.138 .....	PI213.....	134
SIS636X Series.....	.299/.299/.138 .....	PI061.....	138
SIS6D38 Series.....	.276/.276/.157 .....	PI047.....	140
SIS104R Series.....	.406/.409/.157 .....	PI040.....	142
SISDR74 Series .....	.299/.299/.171 .....	PI063.....	144
SISCDRH74 Series .....	.295/.295/.177 .....	PI016.....	146
SISCDRH124 Series.....	.484/.484/.177 .....	PI039.....	148



**DATA SHEETS**

**SMT Shielded Drum Core Inductors**

	L / W / H (in.) Max	Doc#	Page
SISDS3316X Series.....	.510/.370/.200 .....	PI035.....	150
SISDT3316X Series.....	.510/.370/.200 .....	PI034.....	152
SIS646CX Series.....	.299/.299/.201 .....	PI053.....	154
SIS105R Series.....	.406/.413/.201 .....	PI038.....	156
SIS12557ZX Series.....	.508/.504/.224 .....	PI116.....	158
SI12555X Series.....	.504/.504/.229 .....	PI097.....	160
SIS1060PX Series .....	.410/.410/.236 .....	PI108.....	162
SIS1212X Series .....	.484/.484/.236 .....	PI209.....	164
SISDR125 Series.....	.492/.492/.236 .....	PI059.....	166
SISCDRH125 Series.....	.492/.492/.236 .....	PI012.....	168
SIS1160X Series.....	.512/.413/.248 .....	PI102.....	170
SI12565X Series.....	.504/.504/.270 .....	PI098.....	174
SIS5022 Series .....	.730/.600/.300 .....	PI049.....	176
SI12575X Series.....	.504/.504/.309 .....	PI099.....	178
SISP1172X Series.....	.482/.482/.315 .....	PI215.....	180
SISCDRH127 Series.....	.492/.492/.315 .....	PI013.....	182
SISDR127 Series.....	.492/.492/.315 .....	PI069.....	184
SIS1682X Series .....	.638/.628/.323 .....	PI054.....	186
SISPI1515ZX Series.....	.638/.598/.394 .....	PI062.....	188
SIS2212X Series .....	.875/.750/.480 .....	PI156.....	190
SISHC1919X Series .....	.756/.748/.500 .....	PI155.....	192



## FLAT COIL INDUCTORS

### SMT Ferrite Core Inductors

	L / W / H (in.) Max	Doc#	Page
SIS120Z Series .....	.508/.508/.197 .....	PI113 .....	194
SIS134 Series .....	.551/.551/.197 .....	PI056 .....	196
SIS105 Series .....	.410/.410/.220 .....	PI036 .....	198
SIS125 Series .....	.508/.508/.220 .....	PI050 .....	200
SIS1206 Series .....	.508/.508/.236 .....	PI114 .....	202
SIS7664X Series .....	.299/.299/.252 .....	PI214 .....	204



**DATA SHEETS**

**SMT Iron Powder Core Inductors**

	L / W / H (in.) Max	Doc#	Page
SIS6572 Series .....	.265/.285/.118 .....	PI115 .....	206
RIS7030A Series .....	.276/.248/.118 .....	PI220 .....	208
SIS6573 Series .....	.285/.265/.118 .....	PI117 .....	210
RIS1330A Series .....	.532/.516/.118 .....	PI154 .....	212
RIS7532A Series .....	.295/.276/.126 .....	PI133 .....	214
RIS1137A Series .....	.433/.409/.146 .....	PI152 .....	216
RIS1040A Series .....	.429/.409/.157 .....	PI218 .....	218
RIS1340A Series .....	.543/.510/.157 .....	PI219 .....	220
RIS6842A Series .....	.268/.268/.165 .....	PI145 .....	222
RIS7440A Series .....	.291/.276/.165 .....	PI142 .....	224
RIS1140A Series .....	.453/.406/.165 .....	PI139 .....	226
RIS1344A Series .....	.551/.512/.173 .....	PI143 .....	228
RIS7950X Series .....	.311/.299/.197 .....	PI221 .....	230
RIS1265A Series .....	.543/.510/.256 .....	PI128 .....	232
SIS6575 Series .....	.551/.512/.256 .....	PI118 .....	234
RIS1365A Series .....	.571/.512/.256 .....	PI144 .....	236
RIS1375A Series .....	.555/.516/.295 .....	PI134 .....	238

## **POWER CUBE INDUCTORS**

**THT Power Cube Inductors**

	L / W / H (in.) Max	Doc#	Page
RIT1180A Series .....	.433/.433/.315 .....	PI135 .....	240
831-02952F .....	.520/.531/.354 .....	PI129 .....	242
RIT1392A Series .....	.520/.520/.362 .....	PI157 .....	244
RIT1295A Series .....	.492/.492/.374 .....	PI151 .....	246



DATA SHEETS

## POWER BEADS INDUCTORS

### SMT Power Bead Inductors

	L / W / H (in.) Max	Doc#	Page
831-01868F.....	.283/.264/.118 .....	PI132.....	248
831-00882F.....	.340/.250/.177 .....	PI130.....	250
831-02522F.....	.340/.250/.177 .....	PI131.....	252
831-02966F.....	.350/.260/.177 .....	PI140.....	254
831-02976F.....	.276/.276/.195 .....	PI141.....	258
831-03100F.....	.402/.276/.195 .....	PI147.....	260
PBD12750 Series .....	.500/.474/.197 .....	PI221.....	262
PBS12160 Series .....	.476/.394/.236 .....	PI223.....	264
831-02972F.....	.410/.315/.256 .....	PI138.....	266
831-02958F.....	.551/.531/.276 .....	PI136.....	268
831-02962F.....	.510/.510/.280 .....	PI137.....	270
PBD13876 Series .....	.540/.413/.299 .....	PI222.....	272
831-02987F.....	.530/.510/.315 .....	PI149.....	274
831-02983F.....	.440/.440/.354 .....	PI148.....	276

### THT Power Bead Inductors

	L / W / H (in.) Max	Doc#	Page
831-03192F.....	.415/.295/.350 .....	PI217.....	278



DATA SHEETS

## TOROID INDUCTORS






### SMT Toroid Inductors

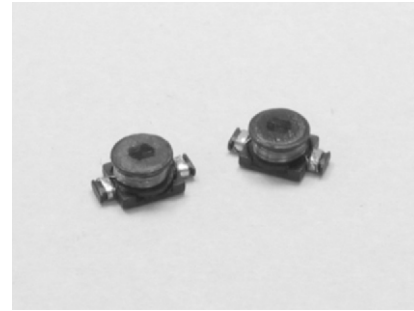
	L / W / H (in.) Max	Doc#	Page
831-01526F.....	.450/.350/.165 .....	PI126.....	280
831-02776F.....	.500/.500/.215 .....	PI119.....	286
831-01181F.....	.500/.500/.215 .....	PI120.....	288
831-01769F.....	.590/.590/.300 .....	PI121.....	290
831-00518F.....	.620/.605/.370 .....	PI125.....	292
831-01886F.....	1.22/1.22/.500 .....	PI122.....	296

### THT Toroid Inductors

	L / W / H (in.) Max	Doc#	Page
831-00186F.....	.700/.700/.380 .....	PI008.....	298
831-00167F.....	.550/.250/.550 .....	PI007.....	300



-  Suitable for DC/DC conversion in notebook computers, PDAs and other handheld devices
-  Unshielded and self-leaded design with high energy storage
-  High performance and flat top for pick and place handling
-  Inductance range from 1 to 1000 micro H
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

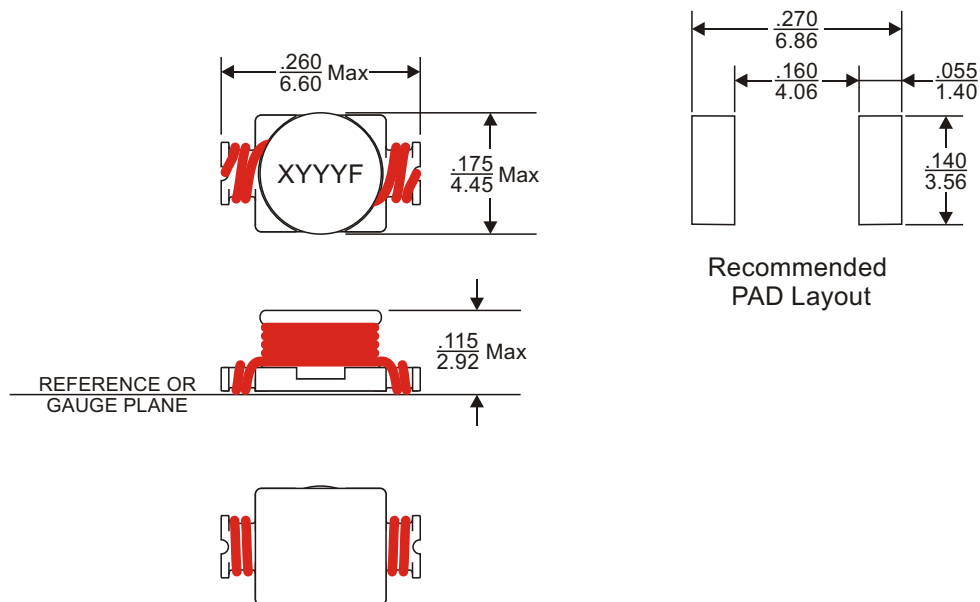
Part Number	Inductance <sup>2</sup> L (uH ± 20%)	DCR ( ) Max	SRF (MHz) Typ	Isat <sup>3</sup> (A)	Irms <sup>4</sup> (A)	Marking (YYYY)
UIS1608M-102F	1.0	0.05	130	2.90	2.90	M102
UIS1608M-152F	1.5	0.05	115	2.60	2.80	M152
UIS1608M-222F	2.2	0.07	90	2.30	2.40	M222
UIS1608M-332F	3.3	0.08	70	2.00	2.00	M332
UIS1608M-472F	4.7	0.09	50	1.50	1.50	M472
UIS1608M-682F	6.8	0.13	45	1.20	1.40	M682
UIS1608M-103F	10	0.16	35	1.10	1.10	M103
UIS1608M-153F	15	0.23	30	0.90	1.20	M153
UIS1608M-223F	22	0.37	20	0.70	0.80	M223
UIS1608M-333F	33	0.51	15	0.58	0.60	M333
UIS1608M-473F	47	0.64	14	0.50	0.50	M473
UIS1608M-683F	68	0.86	11	0.40	0.40	M683
UIS1608M-104F	100	1.27	9	0.31	0.30	M104
UIS1608M-154F	150	2.00	6	0.27	0.25	M154
UIS1608M-224F	220	3.11	5.5	0.22	0.20	M224
UIS1608M-334F	330	3.80	5	0.18	0.16	M334
UIS1608M-474F	470	5.06	4	0.16	0.15	M474
UIS1608M-684F	680	9.20	3	0.14	0.12	M684
UIS1608M-105F	1000	13.8	2	0.10	0.07	M105

**Notes:**

- Ordering Information: UIS1608a - bbbFc.  
UIS1608 = Product Type.  
a = Tolerance of Inductance (M= ±20%).  
bbb = Inductance value in uH (i.e. 472 = 4.7uH; 473 = 47uH; 474 = 470uH; 105 = 1000uH).  
F = Internal Control Code.  
c = Packaging Code (U = Tape & Reel Packaging in 7 inch Reel; T = Tape & Reel Packaging in 13 inch).
- Inductance is tested at 100kHz, 0.1Vrms.
- Inductance drops 10% typical at Isat.
- T=15°C rise typical at Irms.
- Operating temperature range: -40°C to +125°C.



## MECHANICAL DIMENSIONS

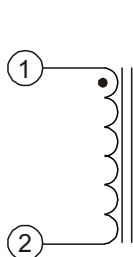


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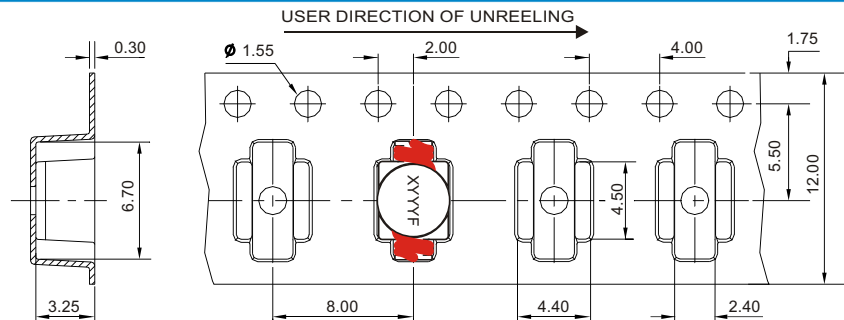
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
- All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
- Unless otherwise specified, all tolerances are  $\pm 0.25$ .

Weight (in gram) :	0.2 typ.
Tape & Reel :	2500 / 13" reel
Tape & Reel :	650 / 7" reel

## SCHEMATIC



## PACKAGING



FOR MORE INFORMATION, PLEASE CONTACT

### HEADQUARTER

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Phase II, Hong Kong Science Park, Shatin, N.T.  
Hong Kong






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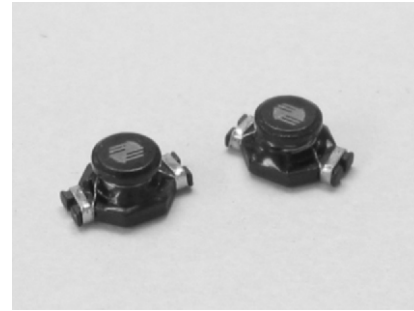
Email: eempl@eleceltek.com

Website: <http://www.eleceltek.com> / [www.eemagnetic.com](http://www.eemagnetic.com)

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-  Suitable for DC/DC conversions in portable computers, camcorders or other communication equipments.
-  High performance and small size with low profile
-  Unshielded and self-leaded design for pick and place handling
-  Inductance range from 0.18 to 47 micro H
-  RoHS compliant



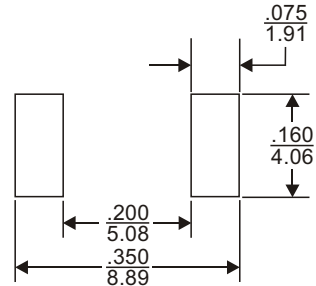
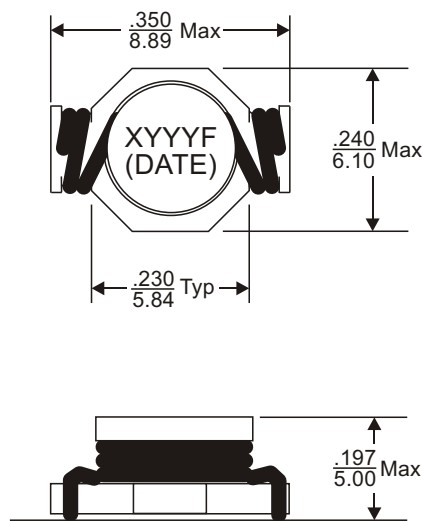
**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Inductance L (uH) Ref.	Inductance <sup>2</sup> L (uH $\pm$ 20%)	DCR (m $\Omega$ ) Max	SRF (MHz) Typ	Isat <sup>3</sup> (A)	Irms <sup>4</sup> (A)	Marking (YYYY)
UIS1813HCM-181F	0.18	0.18	3.0	800	14.0	10.0	M181
UIS1813HCM-331F	0.33	0.33	4.0	600	10.0	7.0	M331
UIS1813HCM-561F	0.56	0.56	10	200	7.7	6.0	M561
UIS1813HCM-122F	1.20	1.15	17	140	5.3	4.4	M122
UIS1813HCM-222F	2.20	2.06	35	100	3.5	3.1	M222
UIS1813HCM-332F	3.30	3.20	40	80	3.0	2.7	M332
UIS1813HCM-472F	4.70	4.70	54	50	2.6	2.2	M472
UIS1813HCM-682F	6.80	6.80	80	45	2.2	1.8	M682
UIS1813HCM-103F	10.0	9.55	110	40	1.9	1.5	M103
UIS1813HCM-153F	15.0	15.3	170	30	1.5	1.2	M153
UIS1813HCM-223F	22.0	22.6	250	25	1.2	1.0	M223
UIS1813HCM-333F	33.0	32.5	350	20	0.99	0.82	M333
UIS1813HCM-473F	47.0	48.1	470	15	0.87	0.72	M473

**Notes:**

- Ordering Information: UIS1813HCa - bbbFc.  
UIS1813HC = Product Type.  
a = Tolerance of Inductance (M =  $\pm$ 20%).  
bbb = Inductance value in uH (i.e. 331 = 0.33uH; 332 = 3.30uH; 333 = 33.0uH).  
F = Internal Control Code.  
c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).
- Inductance is tested at 0.25Vrms, 100kHz.
- Isat is peak current for approximately 30% roll-off.
- T=40°C rise typical at Irms.
- Operating temperature range: -40°C to +125°C.
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

## MECHANICAL DIMENSIONS



## Recommended PAD Layout

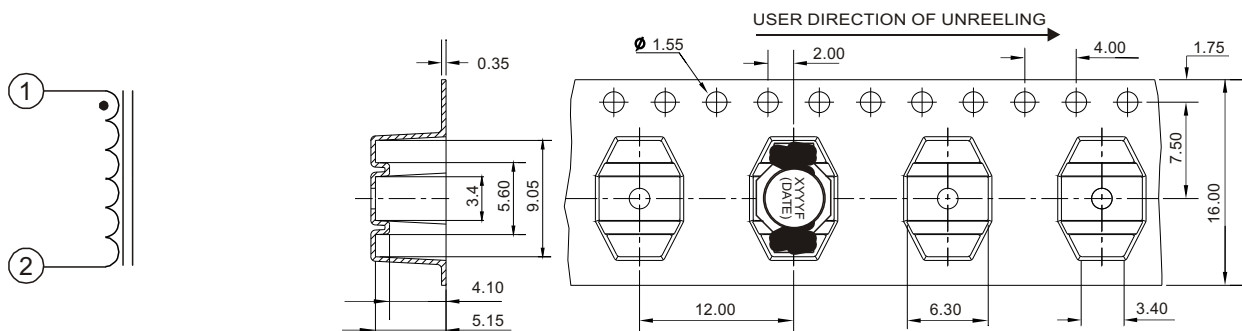
Notes:

7. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in inches.
8. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 0.7 typ.
Tape & Reel	: 1000 / reel

## SCHEMATIC

## PACKAGING



FOR MORE INFORMATION, PLEASE CONTACT

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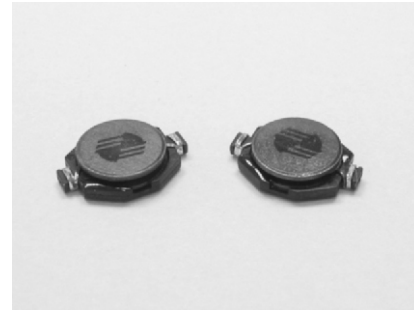
Website: <http://www.eleceltek.com> / [www.eemagnetic.com](http://www.eemagnetic.com)

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-  Suitable for DC/DC conversions in notebook computers, PDAs and plamtops
-  Small size and high performance with low profile
-  Unshielded and self-leaded design for pick and place handling
-  Inductance range from 10 to 1000 micro H
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

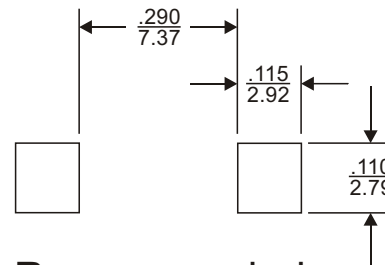
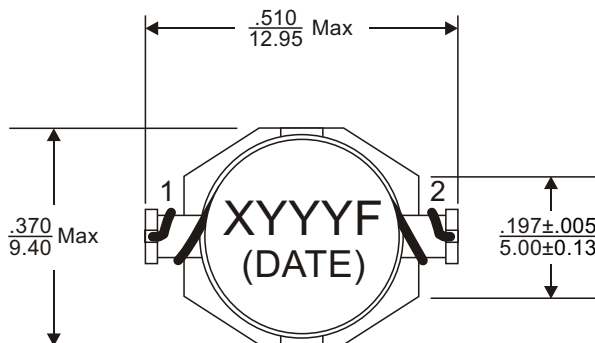
Part Number	Inductance <sup>2</sup> L (uH $\pm$ 20%)	DCR (m $\Omega$ ) Max	SRF (MHz) Typ	Isat <sup>3</sup> (A)	Irms <sup>4</sup> (A)	Marking (YYYY)
UIS3308M-103F	10	110	35	2.4	2.0	M103
UIS3308M-153F	15	150	33	2.0	1.5	M153
UIS3308M-223F	22	230	25	1.6	1.3	M223
UIS3308M-333F	33	300	19	1.4	1.1	M333
UIS3308M-473F	47	390	14	1.0	0.8	M473
UIS3308M-683F	68	660	12	0.9	0.7	M683
UIS3308M-104F	100	840	10	0.7	0.6	M104
UIS3308M-154F	150	1200	8	0.6	0.5	M154
UIS3308M-224F	220	1900	6	0.5	0.4	M224
UIS3308M-334F	330	2700	5	0.4	0.3	M334
UIS3308M-474F	470	4000	4	0.3	0.2	M474
UIS3308M-684F	680	5300	3	0.2	0.1	M684
UIS3308M-105F	1000	8400	2.5	0.1	0.05	M105

**Notes:**

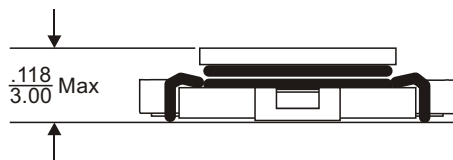
- Ordering Information: UIS3308a - bbbFc.  
UIS3308 = Product Type.  
a = Tolerance of Inductance (M=  $\pm$ 20%).  
bbb = Inductance value in uH (i.e. 473 = 47uH; 474 = 470uH; 105 = 1000uH).  
F = Internal Control Code.  
c = Packaging Code (T = Tape & Reel Packaging in 13 inch).
- Inductance is tested at 100kHz, 0.1Vrms.
- Inductance drops 10% typical at Isat.
- T=30°C rise typical at Irms.
- Operating temperature range: -40°C to +125°C.
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



MECHANICAL DIMENSIONS



Recommended  
PAD Layout

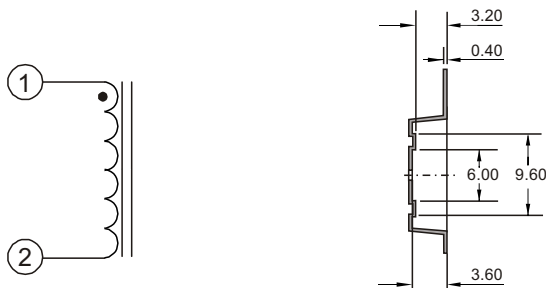


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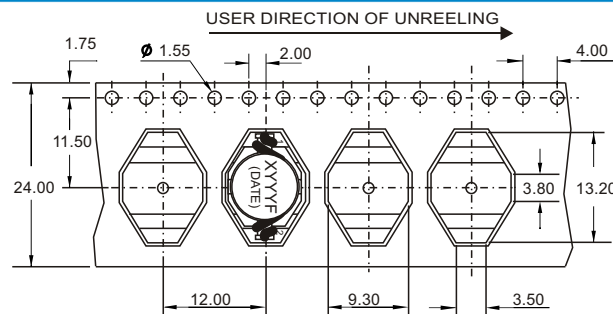
7. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in inches.  
8. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 0.8 typ.
Tape & Reel	: 1400 / reel

SCHEMATIC



PACKAGING



FOR MORE INFORMATION, PLEASE CONTACT

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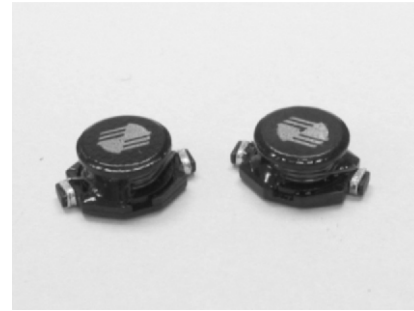
Email: eempl@eleceltek.com

Website: <http://www.eleceltek.com> / [www.eemagnetic.com](http://www.eemagnetic.com)

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-  Suitable for power source circuits, PDAs and notebook computers
-  Unshielded and self-leaded design with high energy storage and low resistance
-  High performance and small size for surface mounting applications
-  Wide inductance range from 1 to 1000 micro H
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

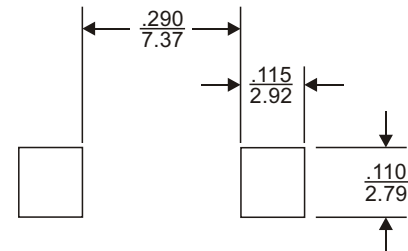
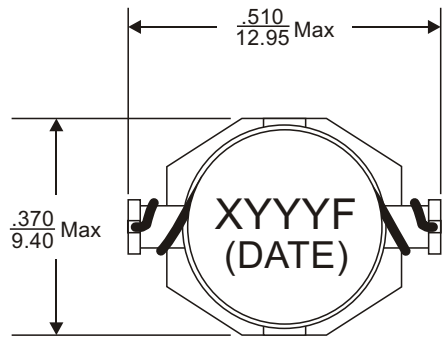
Part Number	Inductance <sup>2</sup> L (uH ±15%)	DCR (m $\Omega$ ) Max	SRF (MHz) Typ	Isat <sup>3</sup> (A)	Irms <sup>4</sup> (A)	Marking (YYYY)
UIS3316P-102F	1.0	9	100	9	6.8	P102
UIS3316P-152F	1.5	10	90	8	6.4	P152
UIS3316P-222F	2.2	12	80	7	6.1	P222
UIS3316P-332F	3.3	15	65	6.4	5.4	P332
UIS3316P-472F	4.7	18	45	5.4	4.8	P472
UIS3316P-682F	6.8	22	38	4.6	4.4	P682
UIS3316P-103F	10	38	30	3.8	3.9	P103
UIS3316P-153F	15	46	27	3	3.1	P153
UIS3316P-223F	22	58	19	2.6	2.7	P223
UIS3316P-253F	25	80	16	2.4	2.5	P253
UIS3316P-333F	33	100	15	2	2.1	P333
UIS3316P-473F	47	140	12	1.6	1.8	P473
UIS3316P-683F	68	180	10	1.4	1.5	P683
UIS3316P-104F	100	260	9	1.2	1.3	P104
UIS3316P-154F	150	380	6	1	1	P154
UIS3316P-224F	220	610	5	0.8	0.8	P224
UIS3316P-334F	330	930	4.5	0.6	0.6	P334
UIS3316P-474F	470	1270	3.5	0.5	0.5	P474
UIS3316P-684F	680	1840	2.5	0.4	0.4	P684
UIS3316P-105F	1000	2880	2.0	0.3	0.3	P105

**Notes:**

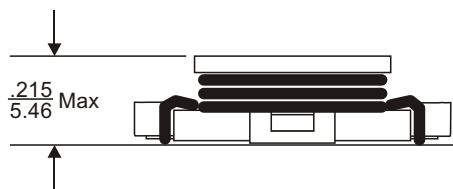
- Ordering Information: UIS3316a - bbbFc.  
UIS3316 = Product Type.  
a = Tolerance of Inductance (P = ±15%).  
bbb = Inductance value in uH (i.e. 472 = 4.7uH; 473 = 47uH; 474 = 470uH; 105 = 1000uH).  
F = Internal Control Code.  
c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).
- Inductance is tested at 100kHz, 0.1Vrms.
- Inductance drops 10% typical at Isat.
- T=15°C rise typical at I rms.
- Operating temperature range: -40°C to +125°C.



# MECHANICAL DIMENSIONS



Recommended Pad Layout

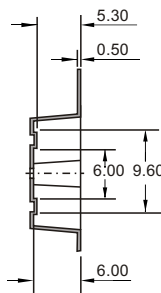
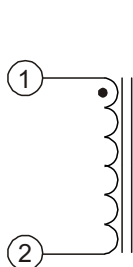


## Notes:

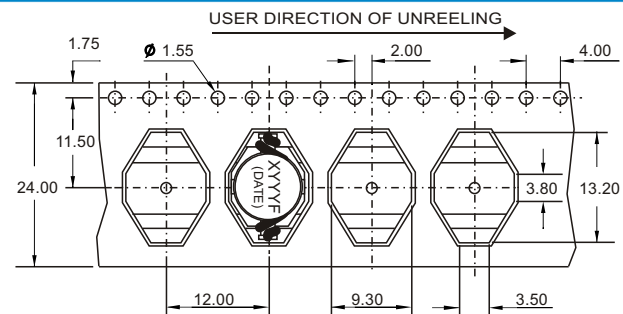
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
- All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in inches.
- Unless otherwise specified, all tolerances are  $\pm 0.010$  /  $\pm 0.25$ .

Weight (in gram)	: 1.0 typ.
Tape & Reel	: 800 / reel

# SCHEMATIC



# PACKAGING



## FOR MORE INFORMATION, PLEASE CONTACT

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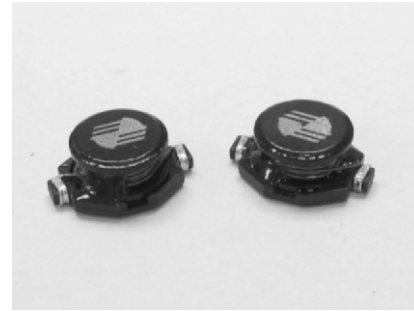
Email: eempl@eleceltek.com

Website: <http://www.eleceltek.com> / [www.eemagnetic.com](http://www.eemagnetic.com)

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-  Suitable for DC/DC conversions in notebook computer, PDAs and plamtop.
-  Small size and high performance with low profile
-  Unshielded and self-leaded design for pick and place handling
-  Inductance range from 0.33 to 4.7 micro H
-  RoHS compliant



ELECTRICAL SPECIFICATION @ 25°C

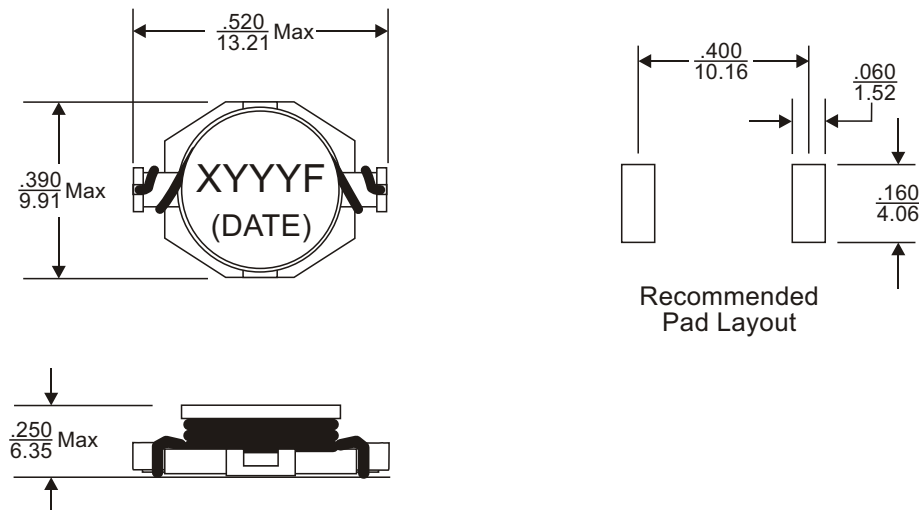
Part Number	Inductance <sup>2</sup> L (uH ± 20%)	DCR (m Ω) Max	SRF (MHz) Typ	Isat <sup>3</sup> (A)	Irms <sup>4</sup> (A)	Marking (YYYY)
UIS3316HCM-331F	0.33	2.0	300	20.0	16.0	M331
UIS3316HCM-681F	0.68	5.0	200	13.0	12.0	M681
UIS3316HCM-102F	1.0	6.0	100	11.0	10.0	M102
UIS3316HCM-152F	1.5	8.0	90	9.0	9.0	M152
UIS3316HCM-222F	2.2	11.0	90	7.8	7.4	M222
UIS3316HCM-272F	2.7	12.0	65	7.0	6.6	M272
UIS3316HCM-332F	3.3	14.0	65	6.4	5.9	M332
UIS3316HCM-472F	4.7	18.0	45	5.4	4.8	M472

**Notes:**

- Ordering Information: UIS3316HCa - bbbFc.  
UIS3316HC = Product Type.  
a = Tolerance of Inductance (M = ±20%).  
bbb = Inductance value in uH (i.e. 331 = 0.33uH; 332 = 3.3uH).  
F = Internal Control Code.  
c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).
- Inductance is tested at 100kHz, 0.1Vrms.
- Inductance drops 10% typical at Isat.
- T=40°C rise typical at Irms.
- Operating temperature range: -40°C to +125°C.
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



MECHANICAL DIMENSIONS

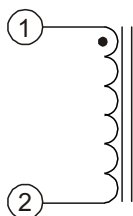


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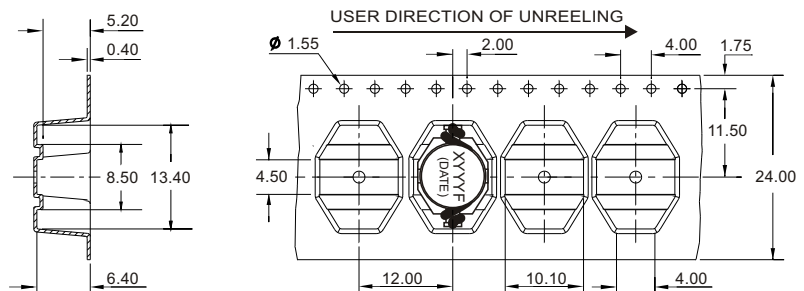
7. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in inches.  
8. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 2 typ.
Tape & Reel	: 750 / reel

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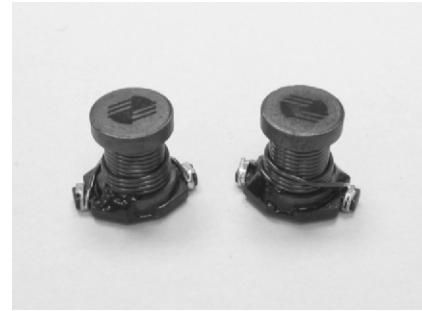
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-  Suitable for DC/DC converters, industrial products and handheld devices.
-  Unshielded and small footprint with high energy storage and low resistance
-  Superior performance and self-leaded design for surface mounting applications
-  Inductance range from 10 to 1000 micro H
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

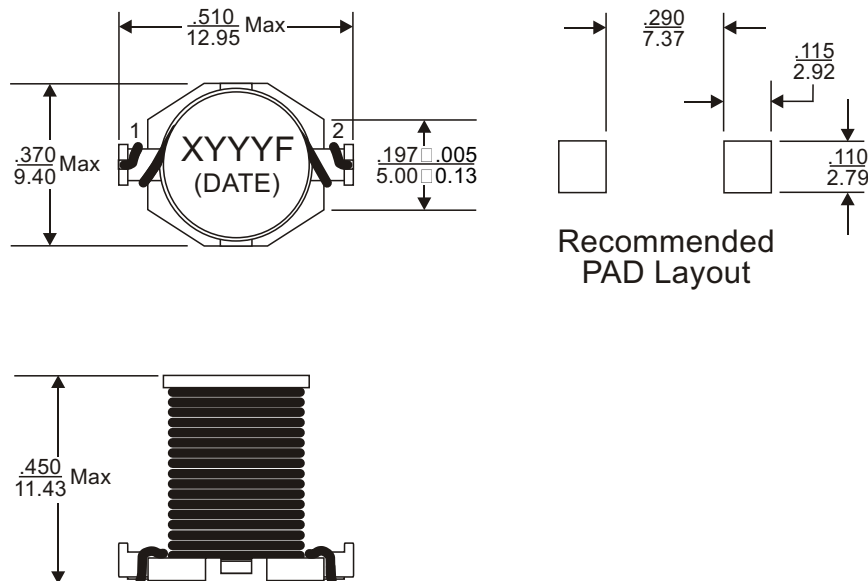
Part Number	Inductance <sup>2</sup> L (uH $\pm$ 20%)	DCR (m Max	SRF (MHz) Typ	Isat <sup>3</sup> (A)	Irms <sup>4</sup> (A)	Marking (YYYY)
UIS3340M-103F	10	40	22	8.0	3.5	M103
UIS3340M-153F	15	50	18	7.0	3.0	M153
UIS3340M-223F	22	66	11	5.5	2.5	M223
UIS3340M-333F	33	80	9	4.0	2.0	M333
UIS3340M-473F	47	110	8	3.8	1.6	M473
UIS3340M-683F	68	170	7	3.0	1.2	M683
UIS3340M-104F	100	220	5	2.5	1.2	M104
UIS3340M-154F	150	340	4	2.0	0.9	M154
UIS3340M-224F	220	440	3.5	1.6	0.7	M224
UIS3340M-334F	330	700	2.5	1.2	0.6	M334
UIS3340M-474F	470	950	2	1.0	0.3	M474
UIS3340M-684F	680	1200	2	1.0	0.2	M684
UIS3340M-105F	1000	2000	1.5	0.8	0.1	M105

**Notes:**

- Ordering Information: UIS3340a - bbbFc.  
UIS3340 = Product Type.  
a = Tolerance of Inductance (M =  $\pm$ 20%).  
bbb = Inductance value in uH (i.e. 223 = 22uH; 224 = 220uH; 105 = 1000uH).  
F = Internal Control Code.  
c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).
- Inductance is tested at 100kHz, 0.1Vrms.
- Inductance drops 10% typical at Isat.
- T=20°C typical at Irms.
- Operating temperature range: -40°C to +125°C.
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



MECHANICAL DIMENSIONS

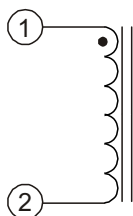


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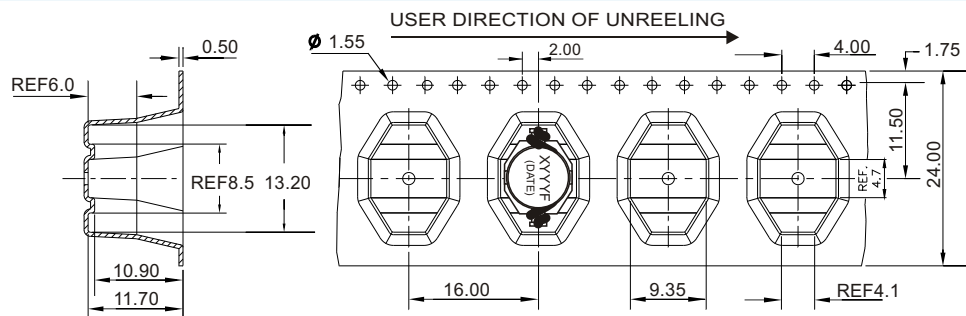
7. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in inches.  
8. Unless otherwise specified, all tolerances are  $\pm .010$  /  $\pm .25$ .

Weight (in gram)	: 2.2 typ.
Tape & Reel	: 250 / reel

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-  Suitable for DC/DC conversions in notebook computers, or other portable handheld devices.
-  High performance and small size for surface mounting applications
-  Unshielded and self-leaded design for pick and place handling
-  Inductance range from 0.78 to 1000 micro H
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

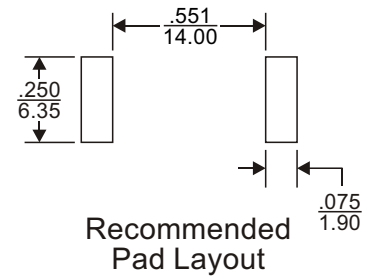
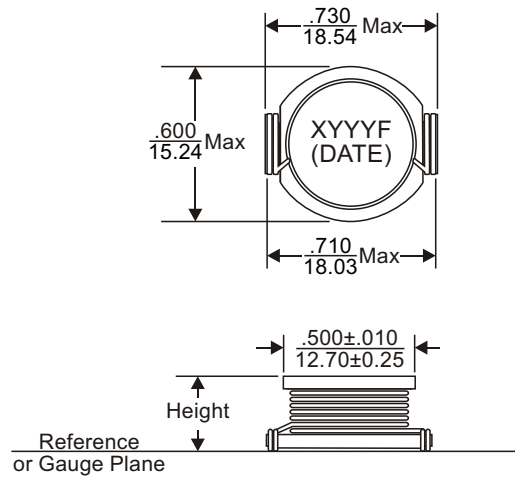
Part Number	Inductance <sup>2</sup> L (uH ±20%)	DCR (m Ω) Max	SRF (MHz) Typ	Isat <sup>3</sup> (A)	Irms <sup>4</sup> (A)	Marking (YYYY)
UIS5010HCM-781F	0.78	2.6	156	30	15	M781
UIS5010HCM-152F	1.5	4.0	100	25	15	M152
UIS5010HCM-222F	2.2	6.1	75	20	12	M222
UIS5010HCM-332F	3.3	8.6	60	17	10	M332
UIS5010HCM-392F	3.9	10	55	15	9	M392
UIS5010HCM-472F	4.7	14	40	13	8.4	M472
UIS5010HCM-602F	6.0	17	35	12	7.5	M602
UIS5010HCM-782F	7.8	18	35	11	7.5	M782
UIS5010HCM-103F	10	26	28	10	6.0	M103
UIS5010HCM-123F	12	28	26	8.5	5.2	M123
UIS5010HCM-153F	15	32	20	8.0	4.4	M153
UIS5010HCM-223F	22	47	20	7.0	3.5	M223
UIS5010HCM-333F	33	66	15	5.5	3.0	M333
UIS5010HCM-473F	47	86	9	4.5	2.6	M473
UIS5010HCM-683F	68	130	8	3.5	2.3	M683
UIS5010HCM-104F	100	190	7	3.0	1.8	M104
UIS5010HCM-154F	150	250	6	2.6	1.5	M154
UIS5010HCM-224F	220	380	5	2.4	1.2	M224
UIS5010HCM-334F	330	560	4	1.9	1.0	M334
UIS5010HCM-474F	470	850	3	1.4	0.82	M474
UIS5010HCM-684F	680	1100	2.5	1.2	0.72	M684
UIS5010HCM-105F	1000	1800	2	1.0	0.56	M105

- Notes:**
- Ordering Information: UIS5010HCa - bbbFc.  
UIS5010HC = Product Type.  
a = Tolerance of Inductance (M = ±20%).  
bbb = Inductance value in uH (i.e. 781 = 0.78uH; 152 = 1.5uH; 153 = 15uH; 154 = 150uH; 105 = 1000uH).  
F = Internal Control Code.  
c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).
  - Inductance is tested at 100kHz, 0.1Vrms.
  - DC current at which the inductance drops 10% typical from its value without current.
  - Average current for a 40°C rise above 25°C ambient.
  - Operating temperature range: -40°C to +125°C.



# MECHANICAL DIMENSIONS

E&E Part Number	Height (Max)
For M781 to M153	$\frac{.315}{8.00}$
For M223 to M683	$\frac{.300}{7.62}$
For M104 to M105	$\frac{.280}{7.11}$

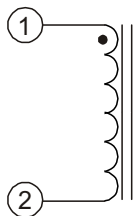


## Notes:

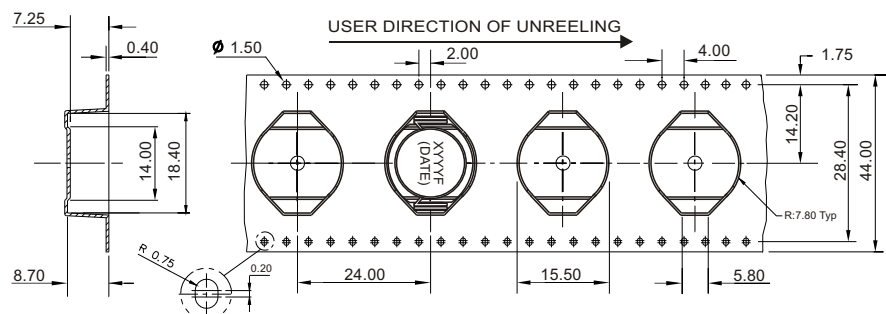
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
- All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
- Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 5 typ.
Tape & Reel	: 250 / reel

## SCHEMATIC



## PACKAGING



## FOR MORE INFORMATION, PLEASE CONTACT

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-  Suitable for VCR, portable communication equipments and other portable handheld devices
-  Unshielded and self-leaded design with flat top for automatic pick-and-place operations
-  Compact design specifically for surface mounting applications
-  Wide inductance range from 1 to 1000 micro H
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

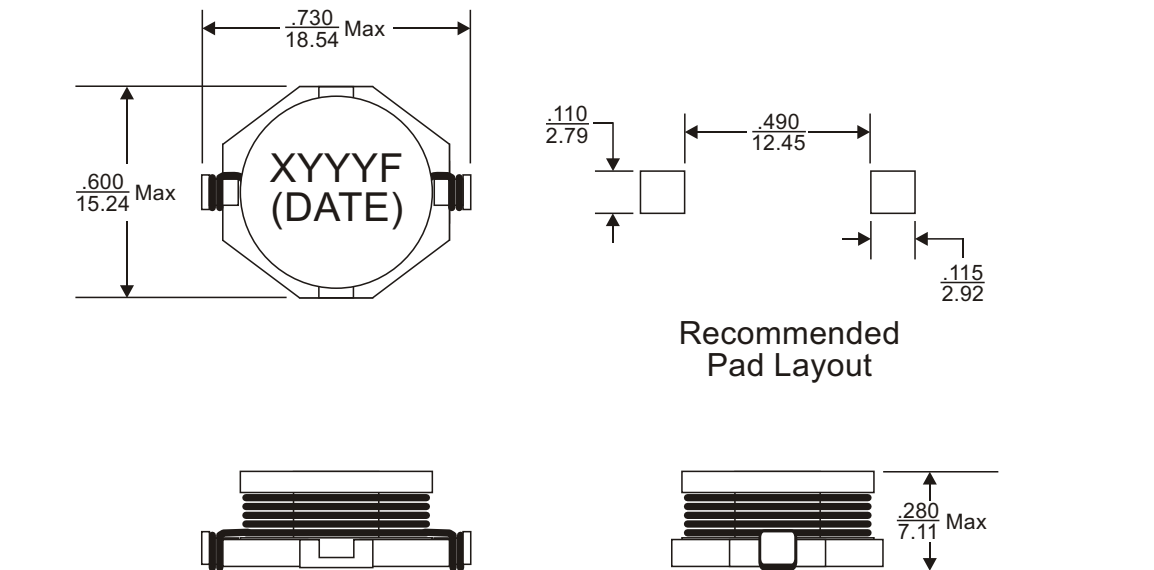
Part Number	Inductance <sup>2</sup> L (uH ± 20%)	DCR (m Ω) Max	SRF (MHz) Typ	Isat <sup>3</sup> (A)	Irms <sup>4</sup> (A)	Marking (YYYY)
UIS5022M-102F	1.0	9	80	20	8.6	M102
UIS5022M-222F	2.2	14	80	16	7.1	M222
UIS5022M-332F	3.3	15	60	14	6.2	M332
UIS5022M-562F	5.6	20	40	12	5.3	M562
UIS5022M-103F	10	31	30	10	4.3	M103
UIS5022M-153F	15	36	22	8.0	4.0	M153
UIS5022M-223F	22	47	20	7.0	3.5	M223
UIS5022M-333F	33	66	15	5.5	3.0	M333
UIS5022M-473F	47	86	9	4.5	2.6	M473
UIS5022M-683F	68	130	8	3.5	2.3	M683
UIS5022M-104F	100	190	7	3.0	1.8	M104
UIS5022M-154F	150	250	6	2.6	1.5	M154
UIS5022M-224F	220	380	5	2.4	1.2	M224
UIS5022M-334F	330	560	4	1.9	1.0	M334
UIS5022M-474F	470	850	3	1.4	0.82	M474
UIS5022M-684F	680	1100	2.5	1.2	0.72	M684
UIS5022M-105F	1000	1800	2	1.0	0.56	M105

**Notes:**

- Ordering Information: UIS5022a - bbbFc.  
UIS5022 = Product Type.  
a = Tolerance of Inductance (M = ±20%).  
bbb = Inductance value in uH (i.e. 222 = 2.2uH; 223 = 22uH; 224 = 220uH; 105 = 1000uH).  
F = Internal Control Code.  
c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).
- Inductance is tested at 0.1Vrms, 100kHz.
- Inductance drops 10% typical at Isat.
- T=40°C rise typical at Iirms.
- Operating temperature range: -40°C to +125°C.
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



## MECHANICAL DIMENSIONS

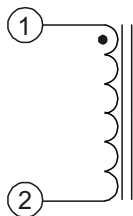


### Notes:

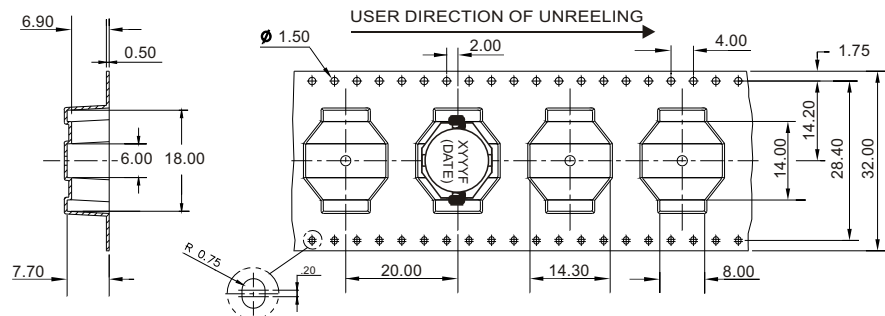
7. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.  
8. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 3.5 typ.
Tape & Reel	: 350 / reel

## SCHEMATIC



## PACKAGING



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-  Suitable for DC/DC converter applications, PDAs and notebook computers
-  Unshielded and self-leaded design with high energy storage and low resistance
-  High performance and flat top for pick and place handling
-  Inductance range from 0.78 to 15 micro H
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

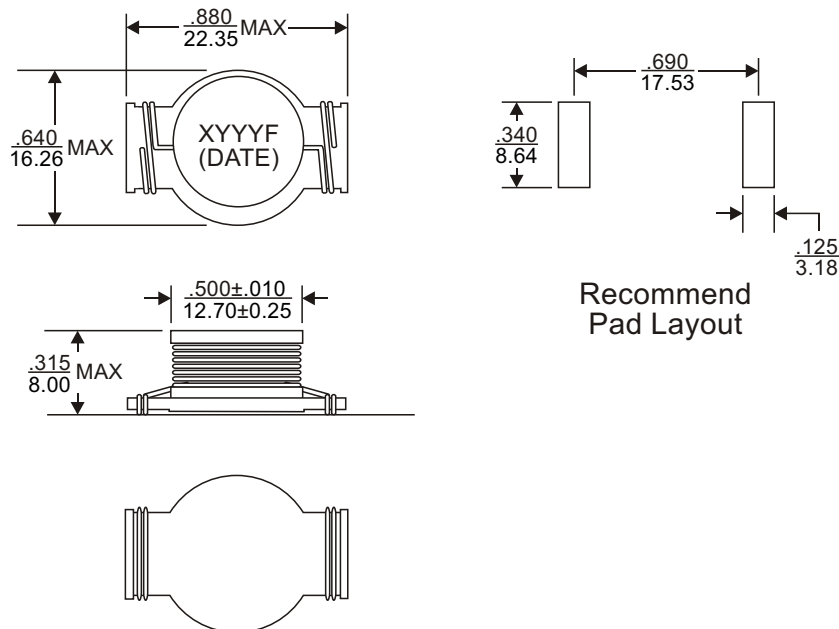
Part Number	Inductance <sup>2</sup> L (uH ± 20%)	DCR (m Ω) Max	SRF (MHz) Typ	Isat <sup>3</sup> (A)	Irms <sup>4</sup> (A)	Marking (YYYY)
UIS5022HCM-781F	0.78	2.6	156	30	15	M781
UIS5022HCM-152F	1.5	4.0	100	25	15	M152
UIS5022HCM-222F	2.2	6.1	75	20	12	M222
UIS5022HCM-332F	3.3	8.6	60	17	10	M332
UIS5022HCM-392F	3.9	10	55	15	9.0	M392
UIS5022HCM-472F	4.7	14	40	13	8.4	M472
UIS5022HCM-602F	6.0	17	35	12	7.5	M602
UIS5022HCM-782F	7.8	18	35	11	7.5	M782
UIS5022HCM-103F	10	26	28	10	6.0	M103
UIS5022HCM-153F	15	32	20	8	4.4	M153

**Notes:**

- Ordering Information: UIS5022HCa - bbbFc.  
UIS5022HC = Product Type.  
a = Tolerance of Inductance (M = ±20%).  
bbb = Inductance value in uH (i.e. 781 = 0.78uH; 152 = 1.5uH; 153 = 15uH).  
F = Internal Control Code.  
c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).
- Inductance is tested at 0.1Vrms, 100kHz.
- Inductance drops 10% typical at Isat.
- T=40°C typical at Irms.
- Operating temperature range: -40°C to +125°C.
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



## MECHANICAL DIMENSIONS

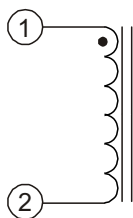


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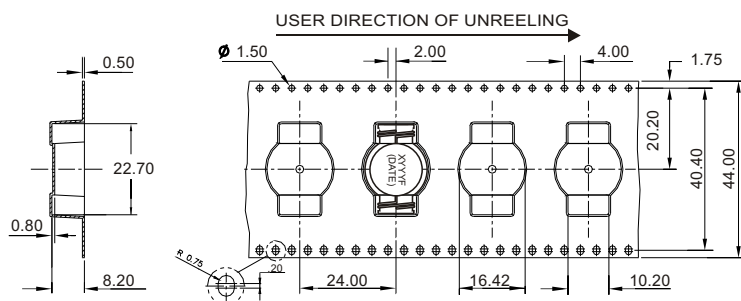
- All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in inches.
- Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 3.2 typ.
Tape & Reel	: 250 / reel

## SCHEMATIC



## PACKAGING



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-  Suitable for notebook computers and other portable handheld devices
-  Unshielded and small in size with high energy storage and low resistance
-  High performance and self-leaded design for surface mounting applications
-  Inductance range from 1 to 68 micro H
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Inductance <sup>2</sup> L (uH)	Inductance Tolerance (%)	DCR (m ) Max	Rated DC <sup>3</sup> Current (A)	Marking (YYYY)
UISCD43M-1R0F	1.0	20	48.7	2.56	M1R0
UISCD43M-1R4F	1.4	20	56.2	2.52	M1R4
UISCD43M-1R8F	1.8	20	63.7	1.95	M1R8
UISCD43M-2R2F	2.2	20	71.2	1.75	M2R2
UISCD43M-2R7F	2.7	20	78.7	1.58	M2R7
UISCD43M-3R3F	3.3	20	86.2	1.44	M3R3
UISCD43M-3R9F	3.9	20	93.7	1.33	M3R9
UISCD43M-4R7F	4.7	20	109	1.15	M4R7
UISCD43M-5R6F	5.6	20	126	0.99	M5R6
UISCD43M-6R8F	6.8	20	132	0.95	M6R8
UISCD43M-8R2F	8.2	20	146	0.84	M8R2
UISCD43M-100F	10	20	182	1.04	M100
UISCD43M-120F	12	20	210	0.97	M120
UISCD43M-150F	15	20	235	0.85	M150
UISCD43M-180F	18	20	338	0.74	M180
UISCD43M-220F	22	20	378	0.68	M220
UISCD43M-270F	27	20	522	0.62	M270
UISCD43K-330F	33	10	540	0.56	K330
UISCD43K-390F	39	10	587	0.52	K390
UISCD43K-470F	47	10	844	0.44	K470
UISCD43K-560F	56	10	937	0.42	K560
UISCD43K-680F	68	10	1117	0.37	K680

**Notes:**

1. Ordering Information: UISCD43a - bbbFc.

UISCD43 = Product Type.

a = Tolerance of Inductance (M =  $\pm 20\%$ ; K =  $\pm 10\%$ ).

bbb = Inductance value in uH (i.e. 4R7 = 4.7uH; 470 = 47uH).

F = Internal Control Code.

c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).

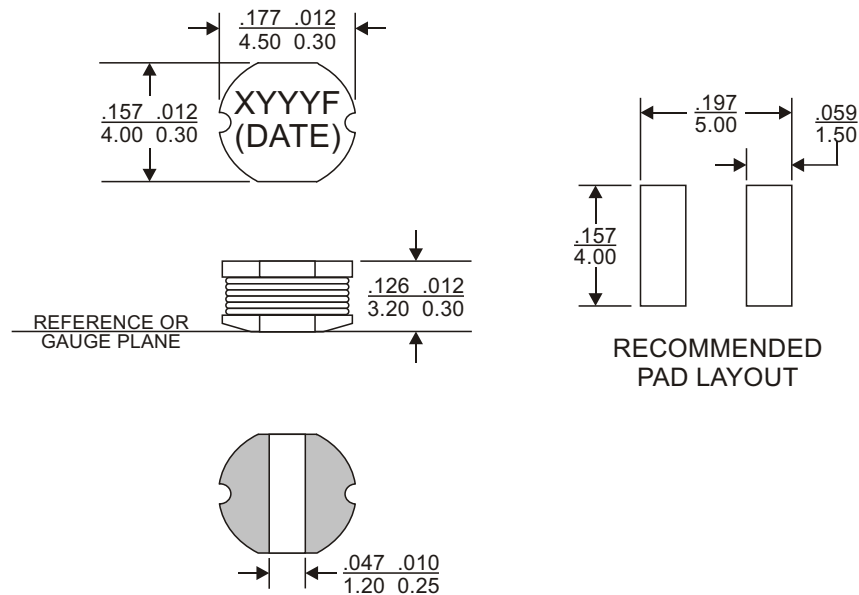
2. Inductance is tested at 1MHz.

3. Rated D.C. current indicates the current when the inductance is 10% lower than its initial value at D.C. superposition, or the current when at T=40°C, whichever is lower.

4. Operating temperature range: -40°C to +125°C.



**MECHANICAL DIMENSIONS**

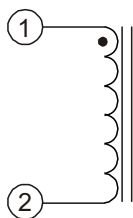


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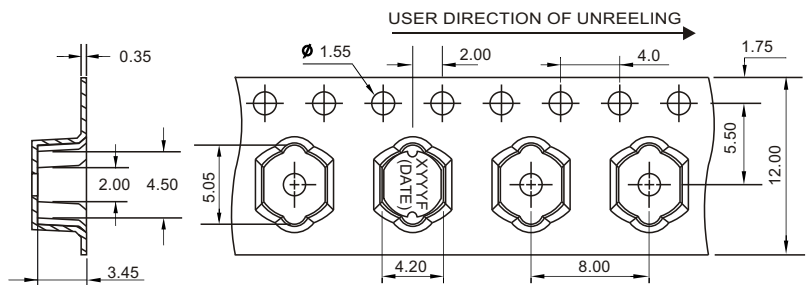
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
- All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
- Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 0.2 typ.
Tape & Reel	: 2000 / reel

**SCHEMATIC**



**PACKAGING**



**FOR MORE INFORMATION, PLEASE CONTACT**

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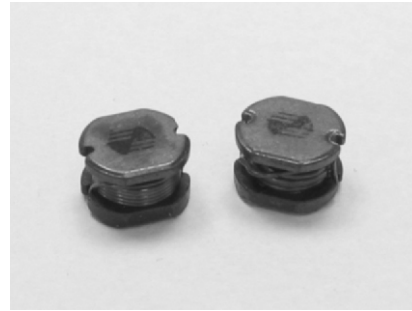
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-  Suitable for notebook computers and other portable handheld devices
-  Unshielded and low profile with high energy capability and low resistance
-  Self-leaded design and flat top for pick and place mounting applications
-  Inductance range from 10 to 220 micro H
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

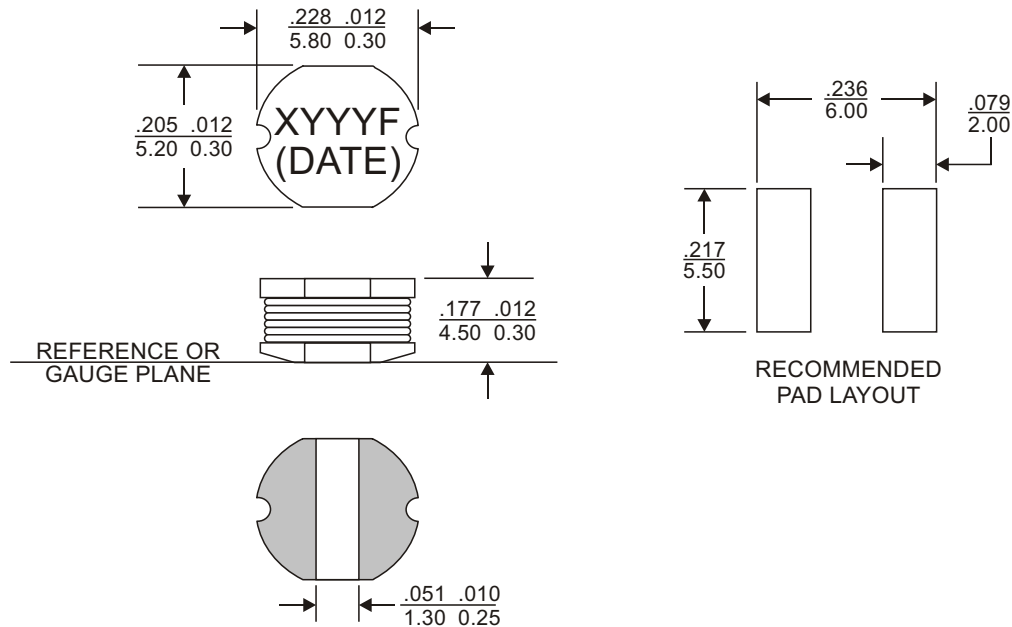
Part Number	Inductance L (uH)	Inductance Tolerance (%)	Test <sup>2</sup> Frequency (Hz)	DCR (m $\Omega$ ) Max	Rated DC <sup>3</sup> Current (A)	Marking (XXXX)
UISC54M-100F	10	20	1M	100	1.44	M100
UISC54M-120F	12	20	1M	120	1.40	M120
UISC54M-150F	15	20	1M	140	1.30	M150
UISC54M-180F	18	20	1M	150	1.23	M180
UISC54M-220F	22	20	1M	180	1.11	M220
UISC54M-270F	27	20	1M	200	0.97	M270
UISC54L-330F	33	15	1M	230	0.88	L330
UISC54L-390F	39	15	1M	320	0.80	L390
UISC54L-470F	47	15	1M	370	0.72	L470
UISC54K-560F	56	10	1M	420	0.68	K560
UISC54K-680F	68	10	1M	460	0.61	K680
UISC54K-820F	82	10	1M	600	0.58	K820
UISC54K-101F	100	10	1k	700	0.52	K101
UISC54K-121F	120	10	1k	930	0.48	K121
UISC54K-151F	150	10	1k	1100	0.40	K151
UISC54K-181F	180	10	1k	1380	0.38	K181
UISC54K-221F	220	10	1k	1570	0.35	K221

**Notes:**

- Ordering Information: UISC54a - bbbFc.  
 UISC54 = Product Type.  
 a = Tolerance of Inductance (M =  $\pm 20\%$ ; L =  $\pm 15\%$ ; K =  $\pm 10\%$ ).  
 bbb = Inductance value in uH (i.e. 180 = 18uH; 181 = 180uH).  
 F = Internal Control Code.  
 c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).
- Test frequency is specified as the frequency for measuring the inductance.
- Rated D.C. current indicates the current when the inductance is 10% lower than its initial value at D.C. superposition, or the current when at  $T=40^{\circ}\text{C}$ , whichever is lower.
- Operating temperature range:  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$ .



**MECHANICAL DIMENSIONS**

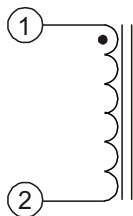


**Notes:**

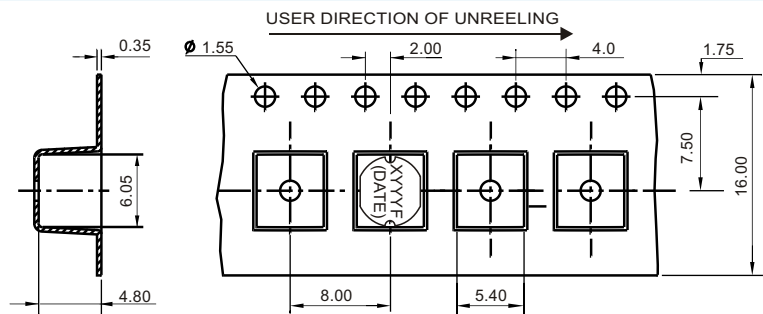
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
- All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
- Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 0.5 typ.
Tape & Reel	: 1500 / reel

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-  Suitable for notebook computers and other portable handheld devices
-  Unshielded and low profile with high energy capability and low resistance
-  High performance and self-leaded design for pick and place mounting process
-  Inductance range from 10 to 470 micro H
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Inductance L (uH±10%)	Test <sup>2</sup> Frequency (Hz)	DCR (mΩ) Max	Rated DC <sup>3</sup> Current (A)	SRF (MHz) Typ	Marking (YYYY)
UISCD75K-100F	10	1M	70	2.3	28	K100
UISCD75K-120F	12	1M	80	2.0	23	K120
UISCD75K-150F	15	1M	90	1.8	22	K150
UISCD75K-180F	18	1M	100	1.6	20	K180
UISCD75K-220F	22	1M	110	1.5	17	K220
UISCD75K-270F	27	1M	120	1.3	15	K270
UISCD75K-330F	33	1M	130	1.2	15	K330
UISCD75K-390F	39	1M	160	1.1	14	K390
UISCD75K-470F	47	1M	180	1.1	13	K470
UISCD75K-560F	56	1M	240	0.94	11	K560
UISCD75K-680F	68	1M	280	0.85	11	K680
UISCD75K-820F	82	1M	370	0.78	10	K820
UISCD75K-101F	100	1k	430	0.72	9.2	K101
UISCD75K-121F	120	1k	470	0.66	7.7	K121
UISCD75K-151F	150	1k	640	0.58	6.1	K151
UISCD75K-181F	180	1k	710	0.51	5.8	K181
UISCD75K-221F	220	1k	960	0.49	5.2	K221
UISCD75K-271F	270	1k	1110	0.42	4.8	K271
UISCD75K-331F	330	1k	1260	0.40	4.3	K331
UISCD75K-391F	390	1k	1770	0.36	4.3	K391
UISCD75K-471F	470	1k	1960	0.34	3.8	K471

**Notes:** 1. Ordering Information: UISCD75a - bbbFc.

UISCD75 = Product Type.

a = Tolerance of Inductance ( K = ±10%).

bbb = Inductance value in uH (i.e. 180 = 18uH; 181 = 180uH).

F = Internal Control Code.

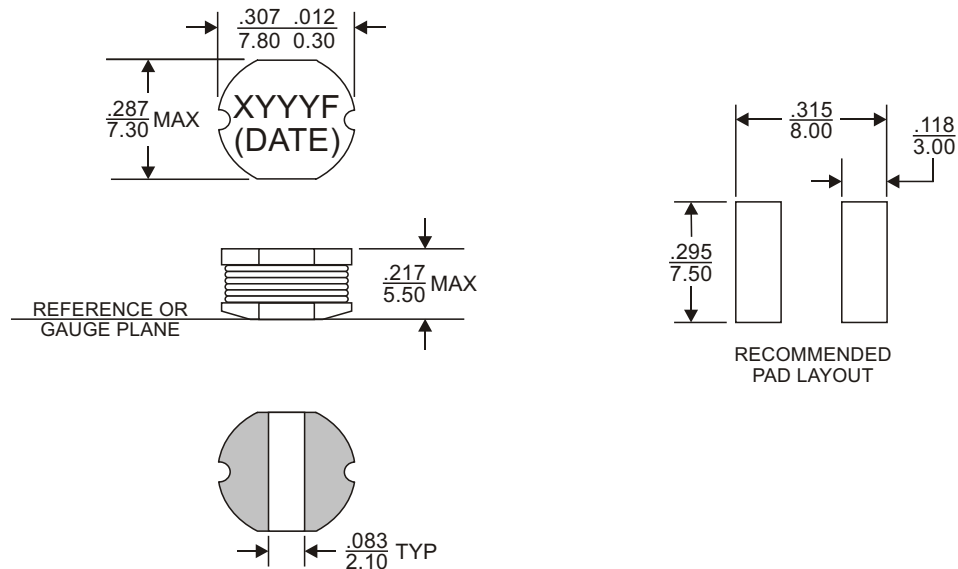
c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).

2. Test frequency is specified as the frequency for measuring the inductance.

3. Rated D.C. current indicates the current when the inductance is 10% lower than its initial value at D.C. superposition, or the current when at T=40°C, whichever is lower.

4. Operating temperature range: -40°C to +125°C.

## MECHANICAL DIMENSIONS



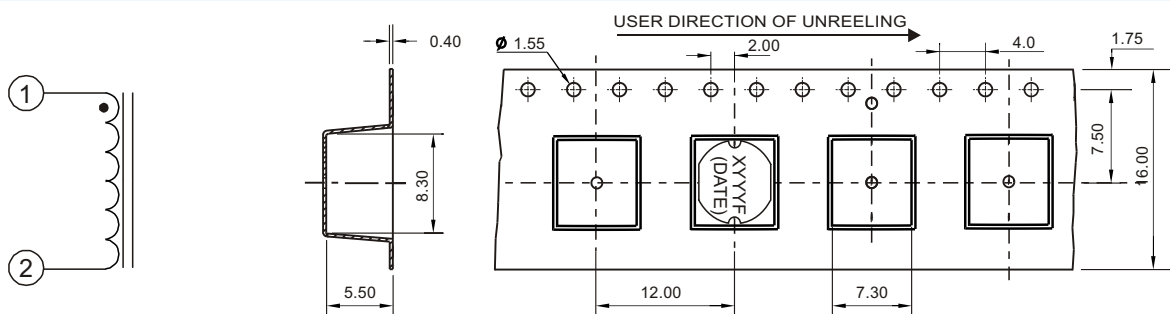
Notes:

5. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
6. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
7. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	:	0.9 typ.
Tape & Reel	:	900 / reel

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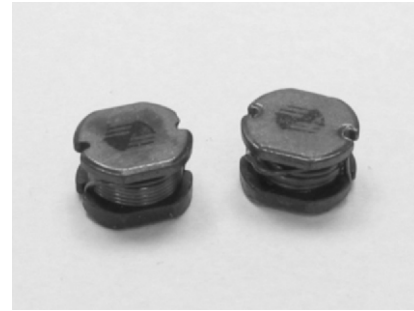
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-  Suitable for notebook computers and other portable handheld devices
-  Unshielded and small in size with low resistance
-  High performance and self-leaded design for surface mounting applications
-  Inductance range from 10 to 560 micro H
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

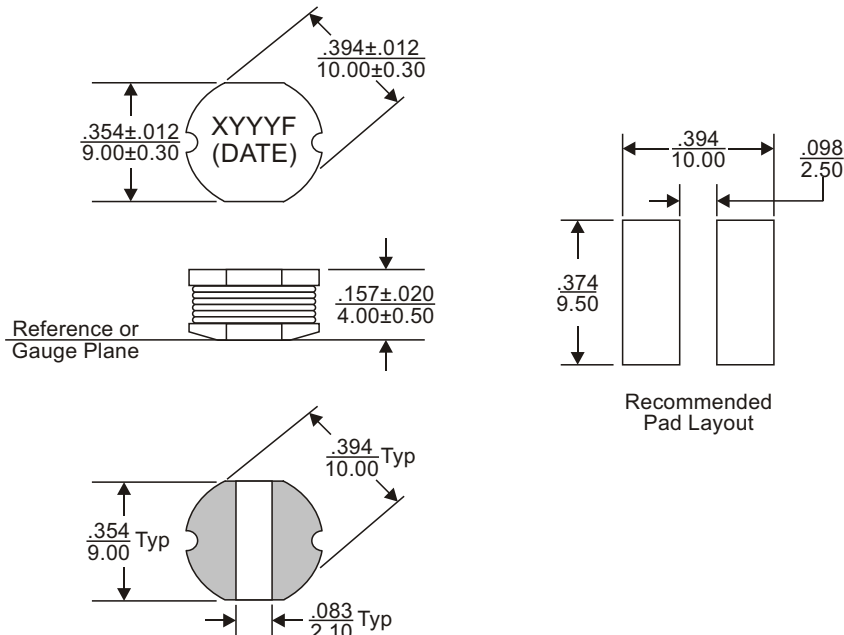
Part Number	Inductance L (uH)	Inductance Tolerance (%)	Test <sup>2</sup> Frequency (Hz)	DCR (m $\Omega$ ) Max	Rated DC <sup>3</sup> Current (A)	SRF (MHz) Typ.	Marking (YYYY)
UISCD104M-100F	10	20	1M	53	2.38	29.9	M100
UISCD104M-120F	12	20	1M	61	2.13	29.7	M120
UISCD104M-150F	15	20	1M	70	1.87	25.1	M150
UISCD104M-180F	18	20	1M	81	1.73	23.0	M180
UISCD104M-220F	22	20	1M	88	1.60	20.0	M220
UISCD104M-270F	27	20	1M	100	1.44	18.5	M270
UISCD104M-330F	33	20	1M	120	1.26	16.9	M330
UISCD104M-390F	39	20	1M	151	1.20	14.9	M390
UISCD104M-470F	47	20	1M	170	1.10	13.8	M470
UISCD104K-560F	56	10	1M	199	1.01	12.6	K560
UISCD104K-680F	68	10	1M	223	0.91	10.4	K680
UISCD104K-820F	82	10	1M	252	0.85	10.0	K820
UISCD104K-101F	100	10	1k	344	0.74	9.42	K101
UISCD104K-121F	120	10	1k	396	0.69	8.74	K121
UISCD104K-151F	150	10	1k	544	0.61	7.29	K151
UISCD104K-181F	180	10	1k	621	0.56	6.53	K181
UISCD104K-221F	220	10	1k	721	0.53	5.85	K221
UISCD104K-271F	270	10	1k	949	0.45	5.51	K271
UISCD104K-331F	330	10	1k	1100	0.42	4.91	K331
UISCD104K-391F	390	10	1k	1245	0.38	4.32	K391
UISCD104K-471F	470	10	1k	1526	0.35	4.06	K471
UISCD104K-561F	560	10	1k	1904	0.32	3.55	K561

**Notes:**

- Ordering Information: UISCD104a - bbbFc.  
UISCD104 = Product Type.  
a = Tolerance of Inductance (M =  $\pm 20\%$ ; K =  $\pm 10\%$ ).  
bbb = Inductance value in uH (i.e. 470 = 47uH; 471 = 470uH).  
F = Internal Control Code.  
c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).
- Test frequency is specified as testing the inductance.
- Rated D.C. current indicates the current when the inductance is 10% lower than its initial value at D.C. superposition, or the current when at T=40°C, whichever is lower.
- Operating temperature range: -40°C to +125°C.



### MECHANICAL DIMENSIONS

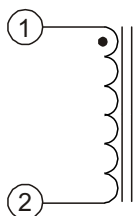


### Notes:

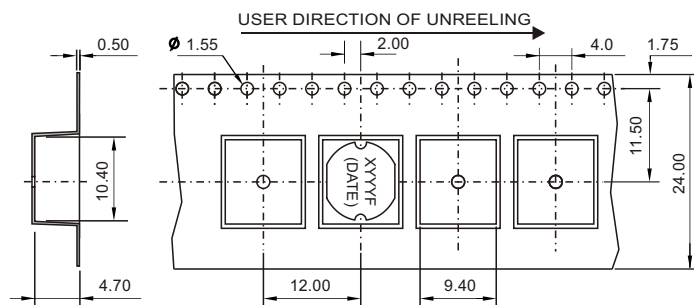
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
- All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
- Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 1.5 typ.
Tape & Reel	: 1000 / reel

### SCHEMATIC



### PACKAGING



FOR MORE INFORMATION, PLEASE CONTACT

### HEADQUARTER

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- Suitable for notebook computers and other portable handheld devices
- Unshielded and small in size with high energy storage
- High performance and self-leaded design for surface mounting applications
- Inductance range from 10 to 820 micro H
- RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Inductance <sup>2</sup> L (uH)	Inductance Tolerance (%)	DCR ( ) Max	Rated DC <sup>3</sup> Current (A)	Marking (YYYY)
UISCD105M-100F	10	20	0.06	2.60	M100
UISCD105M-120F	12	20	0.07	2.45	M120
UISCD105M-150F	15	20	0.08	2.27	M150
UISCD105M-180F	18	20	0.09	2.15	M180
UISCD105M-220F	22	20	0.10	1.95	M220
UISCD105M-270F	27	20	0.11	1.76	M270
UISCD105M-330F	33	20	0.12	1.50	M330
UISCD105M-390F	39	20	0.14	1.37	M390
UISCD105K-470F	47	10	0.17	1.28	K470
UISCD105K-560F	56	10	0.19	1.17	K560
UISCD105K-680F	68	10	0.22	1.11	K680
UISCD105K-820F	82	10	0.25	1.00	K820
UISCD105K-101F	100	10	0.35	0.97	K101
UISCD105K-121F	120	10	0.40	0.89	K121
UISCD105K-151F	150	10	0.47	0.78	K151
UISCD105K-181F	180	10	0.63	0.72	K181
UISCD105K-221F	220	10	0.73	0.66	K221
UISCD105K-271F	270	10	0.97	0.57	K271
UISCD105K-331F	330	10	1.15	0.52	K331
UISCD105K-391F	390	10	1.30	0.48	K391
UISCD105K-471F	470	10	1.48	0.42	K471
UISCD105K-561F	560	10	1.90	0.33	K561
UISCD105K-681F	680	10	2.25	0.28	K681
UISCD105K-821F	820	10	2.55	0.24	K821

**Notes:** 1. Ordering Information: UISCD75a - bbbFc.

UISCD75 = Product Type.

a = Tolerance of Inductance ( M =  $\pm 20\%$ ; K =  $\pm 10\%$ ).

bbb = Inductance value in uH (i.e. 180 = 18uH; 181 = 180uH).

F = Internal Control Code.

c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).

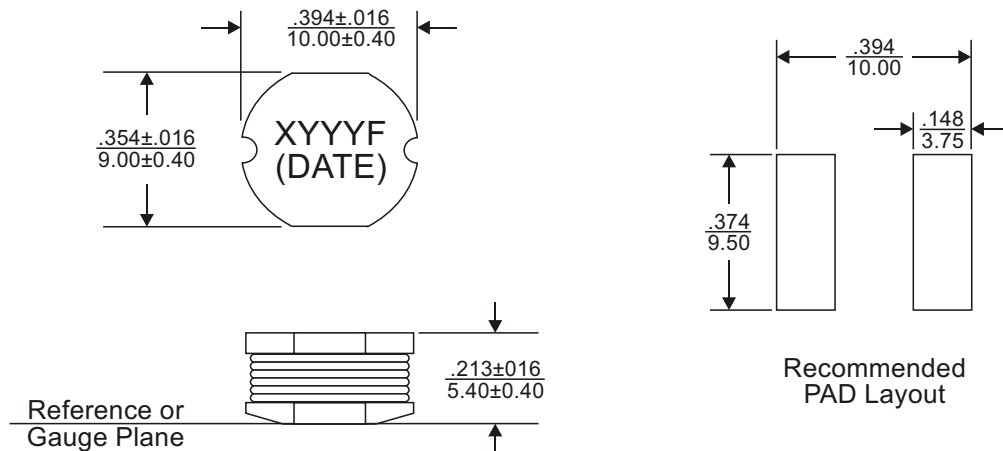
2. Inductance is tested at 1kHz, 0.1Vrms.

3. Rated D.C. current indicates the current when the inductance is 10% lower than its initial value at D.C. superposition, or the current when at T=40°C, whichever is lower.

4. Operating temperature range: -40°C to +125°C.



**MECHANICAL DIMENSIONS**

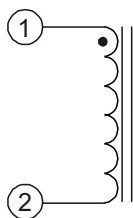


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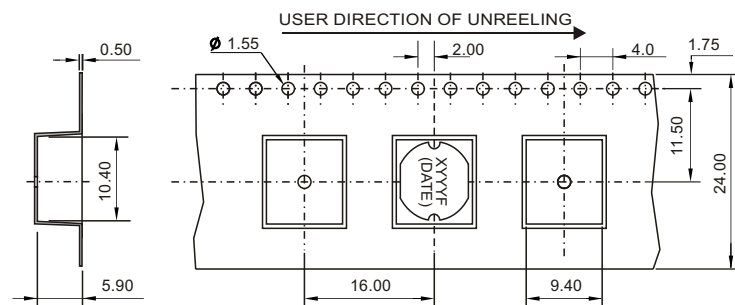
5. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
6. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
7. Unless otherwise specified, all tolerances are  $\pm 0.25$ .

Weight (in gram)	: 1.7 typ.
Tape & Reel	: 600 / reel

**SCHEMATIC**



**PACKAGING**



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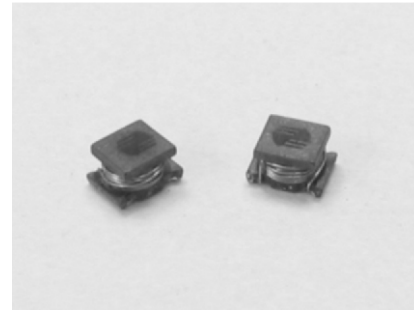
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-  Suitable for DC/DC conversions in portable computers, VCR or other communication equipments.
-  High performance and small size with low profile
-  Unshielded and self-leaded design for pick and place handling
-  Inductance range from 1 to 560 micro H
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

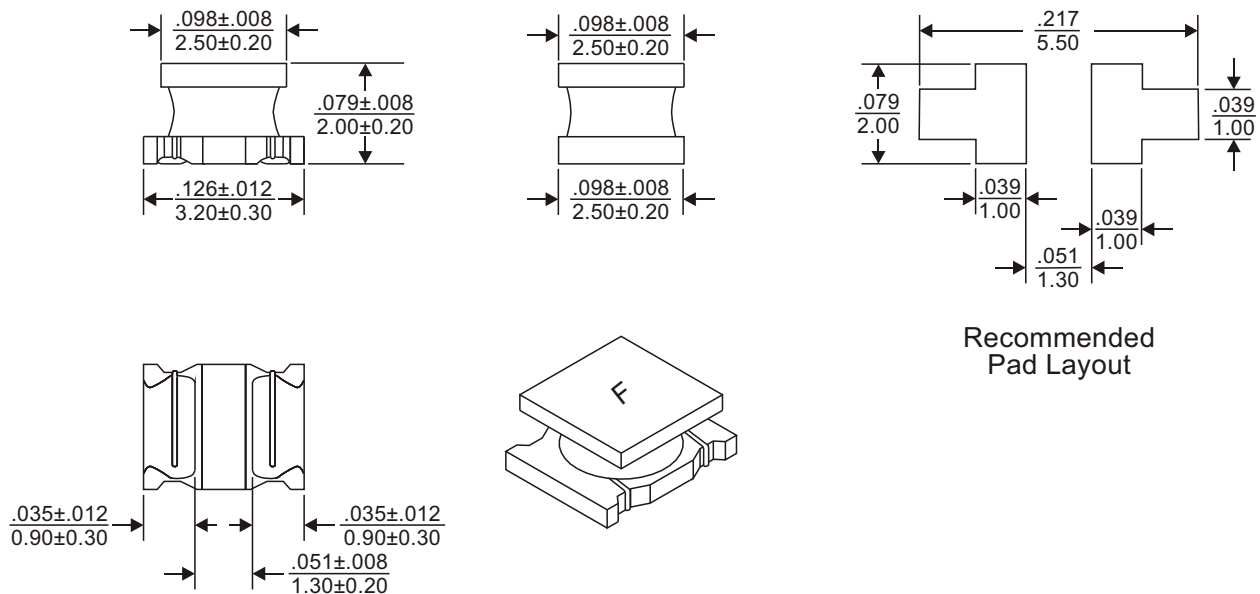
Part Number	Inductance L (uH)	Inductance Tolerance (%)	Test <sup>3</sup> Frequency (Hz)	DCR ( ) Max	SRF (MHz) Typ.	Rated Current (mA)	Marking (ZYYY)
UISH3C2M-1R0F	1.0	20	1M	78m	100	1000	21R0
UISH3C2M-2R2F	2.2	20	1M	126m	64	790	22R2
UISH3C2M-4R7F	4.7	20	1M	195m	43	650	24R7
UISH3C2K-100F	10	10	1M	390m	26	450	2100
UISH3C3M-1R0F	1.0	20	1M	117m	96	800	31R0
UISH3C3M-2R2F	2.2	20	1M	169m	64	600	32R2
UISH3C3M-4R7F	4.7	20	1M	260m	43	450	34R7
UISH3C3K-100F	10	10	1M	572m	26	300	3100
UISH3C3K-220F	22	10	1M	923m	19	250	3220
UISH3C3K-470F	47	10	1M	1.69	15	170	3470
UISH3C3K-101F	100	10	1M	4.55	10	100	3101
UISH3C3K-221F	220	10	1M	10.92	6.8	70	3221
UISH3C3K-331F	330	10	1M	13.00	5.6	60	3331
UISH3C3K-391F	390	10	1M	22.10	5.0	60	3391
UISH3C3K-471F	470	10	1k	24.70	5.0	60	3471
UISH3C3K-561F	560	10	1k	28.60	5.0	60	3561

**Notes:**

- Ordering Information: UISH3C2/3a - bbbFc.  
 UISH3C2/3 = Product Type.  
 a = Tolerance of Inductance (M=  $\pm 20\%$ , K =  $\pm 10\%$ ).  
 bbb = Inductance value in uH (i.e. 4R7 = 4.7uH; 470 = 47uH; 471 = 470uH).  
 F = Internal Control Code.  
 c = Packaging Code (U = Tape & Reel Packaging in 7 inch Reel).
- UISH3C2M-1R0, UISH3C2M-2R2, UISH3C2M-4R7 and UISH3C2K-100 are low DCR type.
- Test frequency is specified for testing the inductance.
- Operating temperature range: -40°C to +125°C.
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



## MECHANICAL DIMENSIONS

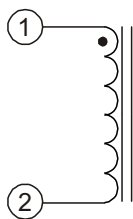


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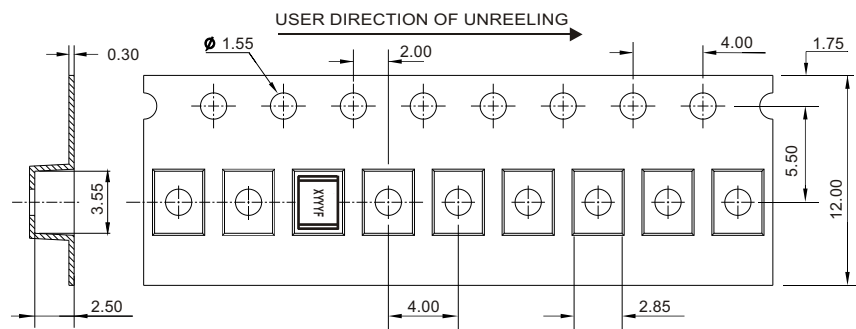
6. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.  
7. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{.025}$ .

Weight (in gram)	: 0.2 typ.
Tape & Reel	: 2000 / reel

## SCHEMATIC



## PACKAGING



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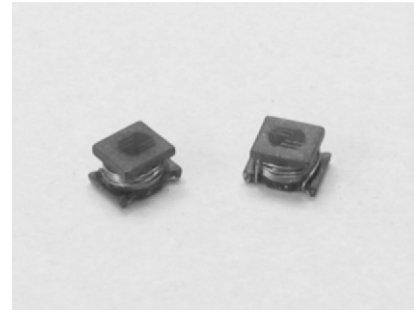
Email: eempl@eleceltek.com

Website: <http://www.eleceltek.com> / [www.eemagnetic.com](http://www.eemagnetic.com)

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-  Suitable for DC/DC conversions in hard disk, VCR, or other electrical equipments.
-  High performance and small size for surface mounting applications
-  Unshielded and self-leaded design for pick and place handling
-  Inductance range from 0.12 to 10000 micro H
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Inductance L (uH $\pm 20\%$ )	Test <sup>2</sup> Frequency (Hz)	SRF (MHz) Typ.	DCR ( ) Max	Rated DC Current (mA)	Marking (YYYY)
UISH5057M-R12F	0.12	1M	450	9.8m	6000	MR12
UISH5057M-R27F	0.27	1M	300	14.0m	5300	MR27
UISH5057M-R47F	0.47	1M	200	18.2m	4800	MR47
UISH5057M-1R0F	1.0	1M	150	26.6m	4000	M1R0
UISH5057M-1R5F	1.5	1M	110	30.8m	3700	M1R5
UISH5057M-2R2F	2.2	1M	80	40.6m	3200	M2R2
UISH5057M-3R3F	3.3	1M	40	50.4m	2900	M3R3
UISH5057M-4R7F	4.7	1M	30	57.4m	2700	M4R7
UISH5057M-6R8F	6.8	1M	25	0.104	2000	M6R8
UISH5057M-100F	10	1M	20	0.13	1700	M100
UISH5057M-150F	15	1M	17	0.21	1400	M150
UISH5057M-220F	22	1M	15	0.266	1200	M220
UISH5057M-330F	33	1M	12	0.448	900	M330
UISH5057M-470F	47	1M	10	0.56	800	M470
UISH5057M-680F	68	1M	7.6	0.94	640	M680
UISH5057M-101F	100	100k	6.5	1.204	560	M101
UISH5057M-151F	150	100k	5.0	2.66	420	M151
UISH5057M-221F	220	100k	4.0	3.36	320	M221
UISH5057M-331F	330	100k	3.1	6.16	270	M331
UISH5057M-471F	470	100k	2.4	7.56	240	M471
UISH5057M-681F	680	100k	1.9	11.34	190	M681
UISH5057M-102F	1000	10k	1.7	14.42	150	M102
UISH5057M-222F	2200	10k	1.2	30.1	100	M222
UISH5057M-472F	4700	10k	0.8	61.04	70	M472
UISH5057M-103F	10000	10k	0.5	140	50	M103

**Notes:**

1. Ordering Information: UISH5057a - bbbFc.

UISH5057 = Product Type.

a = Tolerance of Inductance (M =  $\pm 20\%$ ).

bbb = Inductance value in uH (i.e. R47 = 0.47uH; 4R7 = 4.7uH; 470 = 47uH; 471 = 470uH).

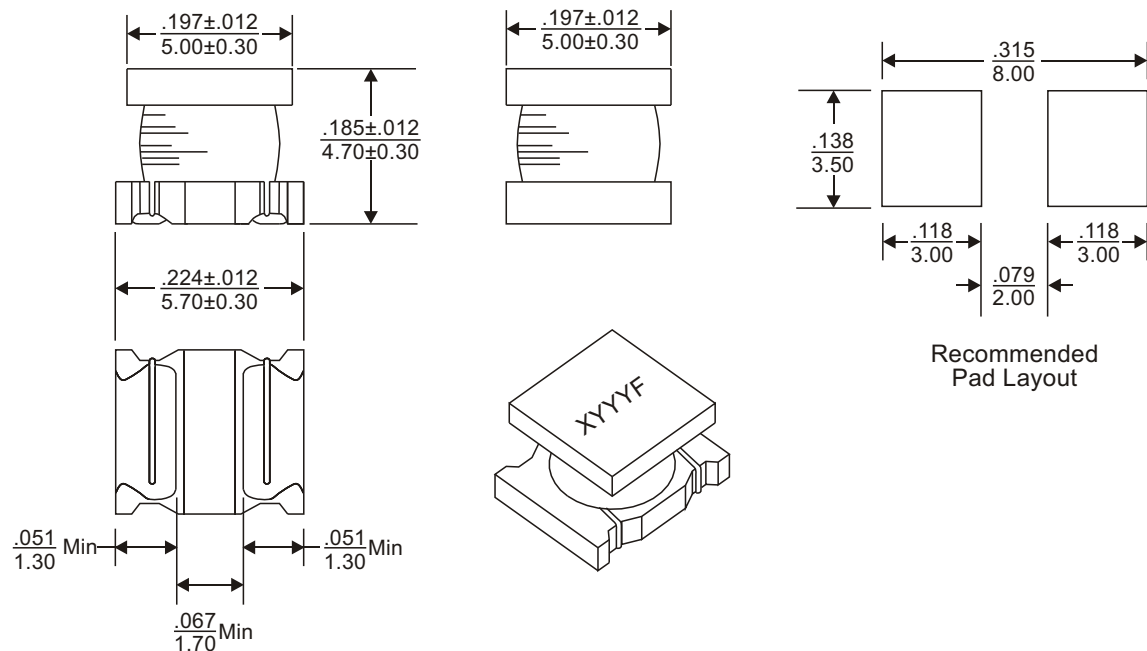
F = Internal Control Code.

c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).

2. Test frequency is specified as the frequency for measuring the inductance.



### MECHANICAL DIMENSIONS

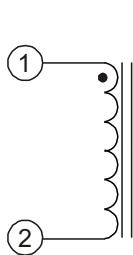


#### Notes:

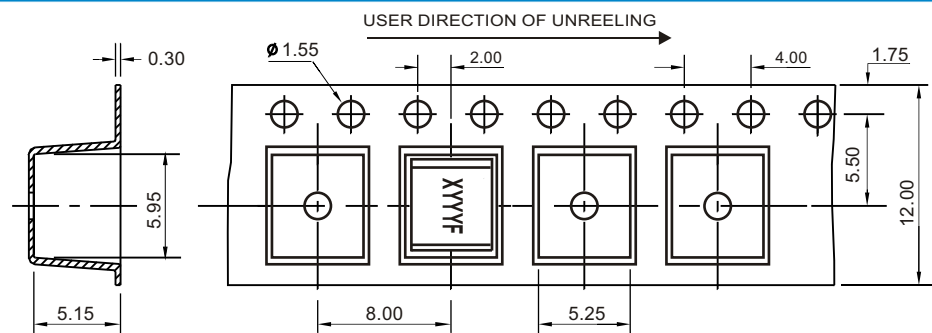
- Operating temperature range:  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$ .
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
- All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
- Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 1.0 typ.
Tape & Reel	: 1400 / reel

### SCHEMATIC



### PACKAGING



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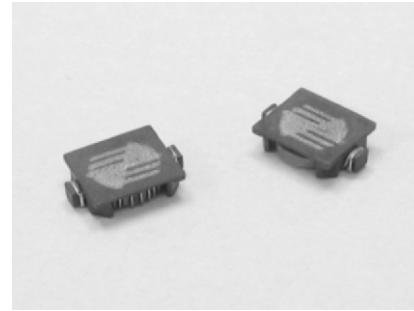
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-  Suitable for DC/DC conversions in notebook computers, or other portable handheld devices.
-  High performance and small size for surface mounting applications
-  Unshielded and self-leaded design for pick and place handling
-  Inductance range from 0.47 to 100 micro H
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

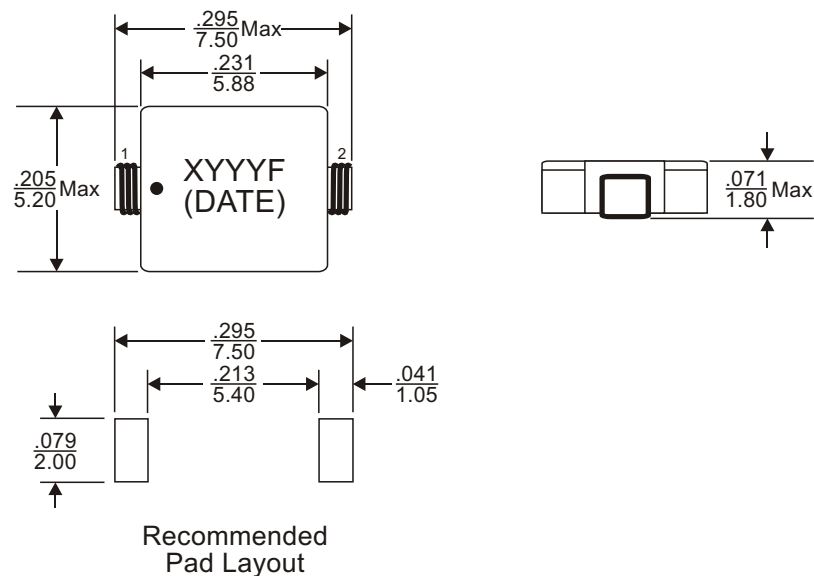
Part Number	Rated Inductance <sup>2</sup> (uH) Typ.	Inductance <sup>3</sup> L (uH ±20%)	DCR (m $\Omega$ ) Typ	Isat <sup>4</sup> (A)	Irms <sup>5</sup> (A)	Volt- sec <sup>2</sup> Typ.	Marking (YYYY)
UISMP2AM-R47F	0.47	0.47	24	5.80	3.52	1.20	MR47
UISMP2AM-R68F	0.68	0.68	27	4.83	3.31	1.27	MR68
UISMP2AM-1R0F	1.00	1.21	67	3.63	2.11	2.00	M1R0
UISMP2AM-1R5F	1.50	1.54	73	3.22	2.02	2.09	M1R5
UISMP2AM-2R2F	2.20	2.30	86	2.64	1.87	2.26	M2R2
UISMP2AM-3R3F	3.30	3.21	98	2.23	1.75	2.42	M3R3
UISMP2AM-4R7F	4.70	4.86	117	1.81	1.60	2.64	M4R7
UISMP2AM-6R8F	6.80	6.85	136	1.53	1.49	2.84	M6R8
UISMP2AM-8R2F	8.20	8.54	167	1.54	1.34	3.15	M8R2
UISMP2AM-100F	10.00	10.02	179	1.42	1.29	3.26	M100
UISMP2AM-150F	15.00	15.18	217	1.16	1.18	3.59	M150
UISMP2AM-220F	22.00	21.40	311	0.97	0.98	4.30	M220
UISMP2AM-330F	33.00	32.74	476	0.79	0.79	5.32	M330
UISMP2AM-470F	47.00	46.48	727	0.66	0.64	6.57	M470
UISMP2AM-680F	68.00	68.53	1108	0.54	0.52	8.11	M680
UISMP2AM-820F	82.00	81.15	1463	0.50	0.45	9.32	M820
UISMP2AM-101F	100.00	99.65	2015	0.45	0.39	10.94	M101

**Notes:**

- Ordering Information: UISMP2Aa - bbbFc.  
UISMP2A = Product Type.  
a = Tolerance of Inductance (M=  $\pm 20\%$ ).  
bbb = Inductance value in uH (i.e. R47 = 0.47uH; 4R7 = 4.7uH; 470 = 47uH; 101 = 100uH).  
F = Internal Control Code.  
c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).
- Rated inductance and Volt- sec are for reference only.
- Inductance is tested at 100kHz, 0.25Vrms, 0Adc.
- Inductance drops 30% typical at Isat.
- Irms for an approximate T of 40°C without core loss. It is recommended that the temperature of the part not exceed 125°C.
- Operating temperature range: -40°C to +125°C.



## MECHANICAL DIMENSIONS

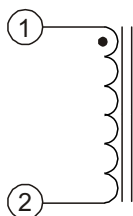


### Notes:

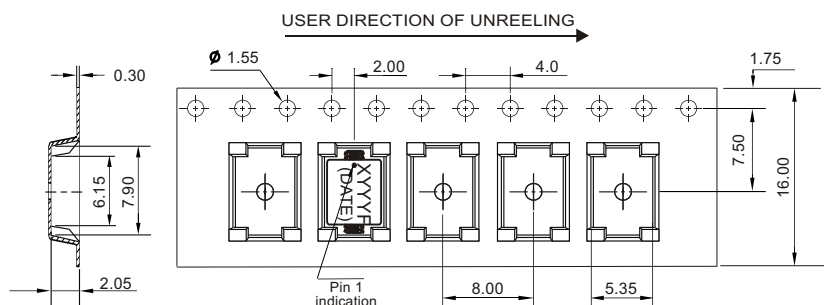
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
- All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
- Unless otherwise specified, all tolerances are  $\pm 0.10$  /  $0.25$ .

Weight (in gram)	: 4 typ.
Tape & Reel	: 3900 / reel

## SCHEMATIC



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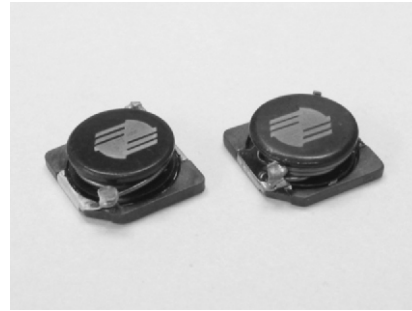
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Website: <http://www.eleceltek.com> / [www.eemagnetic.com](http://www.eemagnetic.com)

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-  Suitable for DC/DC conversions in notebook computers, or portable handheld devices.
-  High performance and small size for surface mounting applications
-  Unshielded and self-leaded design for pick and place handling
-  Inductance range from 1.05 to 1030 micro H
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Inductance <sup>2</sup> L (uH ± 20%)	DCR (m Ω) Max	Saturation <sup>3</sup> Current, Isat (A)	Rated Current, Irms (A)	Marking (XYYY)
UISP0648M-102F	1.05	5.5	17.7	12.2	M102
UISP0648M-192F	1.9	7.5	12.9	9.6	M192
UISP0648M-282F	2.8	9.8	10.5	8.1	M282
UISP0648M-342F	3.4	9.6	9.1	7.6	M342
UISP0648M-462F	4.6	15.5	7.8	6.5	M462
UISP0648M-682F	6.8	22	6.6	5.1	M682
UISP0648M-103F	10.2	33	5.4	4.3	M103
UISP0648M-153F	15.2	44	4.4	3.6	M153
UISP0648M-223F	22	61	3.7	3.3	M223
UISP0648M-323F	32	90	2.9	2.5	M323
UISP0648M-463F	46	148	2.4	2.1	M463
UISP0648M-653F	65	166	2.0	1.8	M653
UISP0648M-104F	100	262	1.7	1.4	M104
UISP0648M-154F	152	410	1.3	1.2	M154
UISP0648M-214F	214	557	1.1	1.0	M214
UISP0648M-324F	320	880	0.9	0.9	M324
UISP0648M-454F	450	1230	0.8	0.7	M454
UISP0648M-644F	645	1660	0.6	0.6	M644
UISP0648M-105F	1030	2680	0.5	0.5	M105

**Notes:**

1. Ordering Information: UISP0648a - bbbFc.

UISP0648 = Product Type.

a = Tolerance of Inductance (M = ±20%).

bbb = Inductance value in uH (i.e. 342 = 3.4uH; 323 = 32uH; 324 = 320uH; 105 = 1000uH).

F = Internal Control Code.

c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).

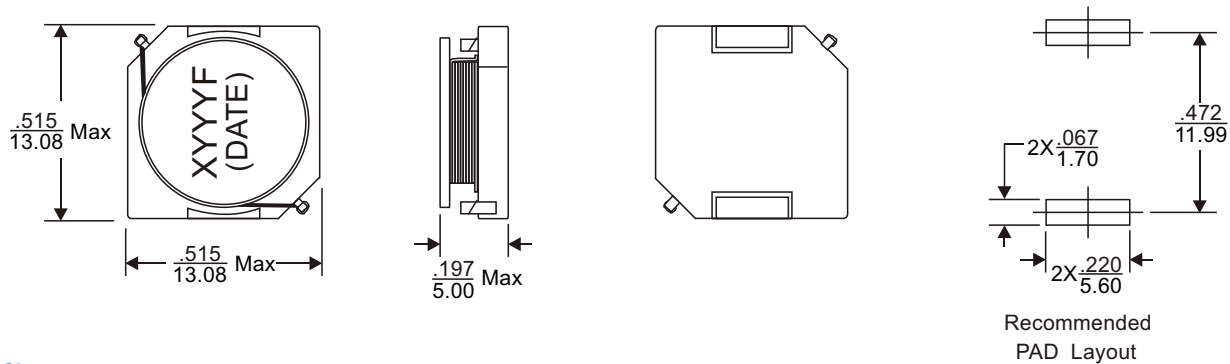
2. Inductance is measured at 100kHz, 0.01Vrms.

3. Inductance drops 10% typical at Isat.

4. Operating temperature range: -40°C to +130°C.



## MECHANICAL DIMENSIONS

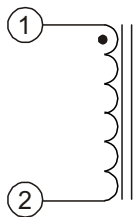


### Notes:

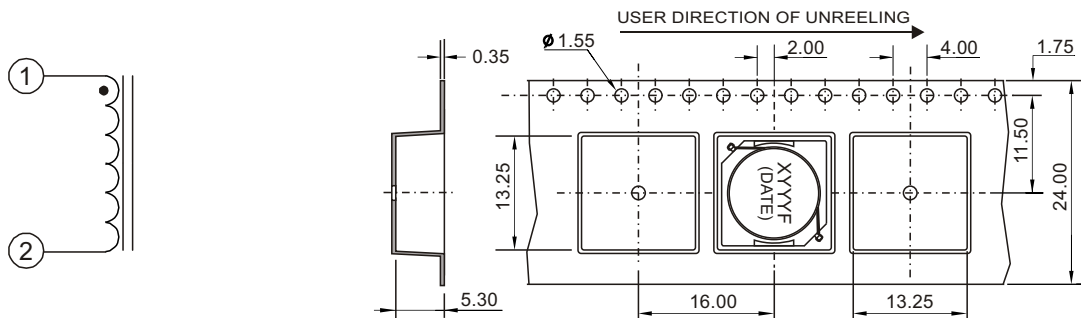
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
- All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
- Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 2.5 typ.
Tape & Reel	: 700 / reel

## SCHEMATIC



## PACKAGING



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Email: eempl@eleceltek.com

Website: <http://www.eleceltek.com> / [www.eemagnetic.com](http://www.eemagnetic.com)

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-  Suitable for DC/DC conversions in notebook computers, VCR or other portable handheld devices.
-  High performance and small size for surface mounting applications
-  Unshielded and self-leaded design for pick and place handling
-  Inductance range from 1.83 to 29 micro H
-  RoHS compliant



ELECTRICAL SPECIFICATION @ 25°C

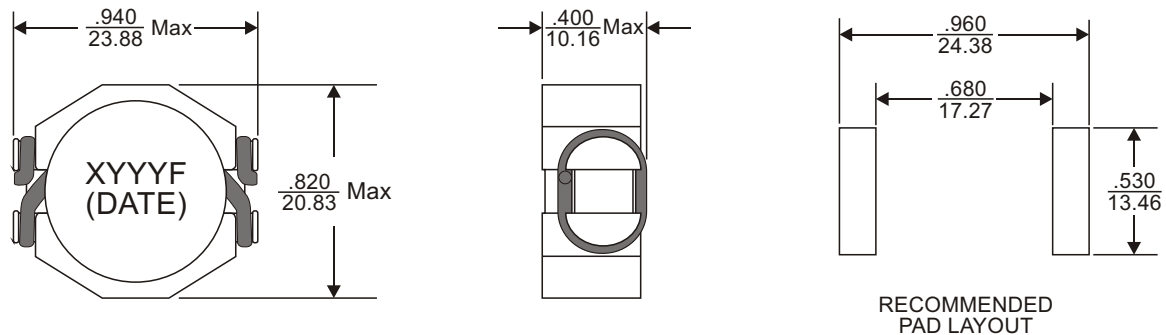
Part Number	Inductance L (uH $\pm 15\%$ )	Inductance <sup>2</sup> @ Irated (uH Typ.)	Irated <sup>3</sup> (Adc)	DCR (m $\Omega$ ) Max.	Isat <sup>4</sup> (Adc)	Heating <sup>5</sup> Current	Marking (YYYY)
UISPB2020L-222F	1.83	1.83	21.8	2.60	40	21.8	L222
UISPB2020L-332F	3.00	3.00	18.3	3.70	35	18.3	L332
UISPB2020L-472F	4.00	4.00	16.8	4.40	28	16.8	L472
UISPB2020L-682F	5.78	5.78	13.6	6.70	25	13.6	L682
UISPB2020L-103F	8.30	8.30	12.6	7.80	20	12.6	L103
UISPB2020L-153F	13.00	13.00	9.7	13.00	18	9.7	L153
UISPB2020L-223F	18.70	18.70	8.1	19.00	13	8.1	L223
UISPB2020L-333F	29.00	29.00	6.5	29.00	10	6.5	L333

**Notes:**

- Ordering Information: UISPB2020a - bbbFc.  
UISPB2020 = Product Type.  
a = Tolerance of Inductance (L =  $\pm 15\%$ ).  
bbb = Inductance value in uH (i.e. 332 = 3.3uH; 153 = 15uH; 333 = 33uH).  
F = Internal Control Code.  
c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).
- Inductance at Irated is typical inductance value for component taken at rated current.
- The rated current listed is the lower of Isat or heating current.
- Inductance drops by 10% typical at saturation current under an ambient temperature of 25°C.
- The heating current indicates the current required to raise the component temperature by approximately 40°C.
- Operating temperature range: -40°C to +125°C.
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



MECHANICAL DIMENSIONS

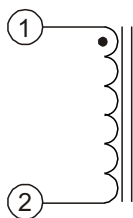


Notes:

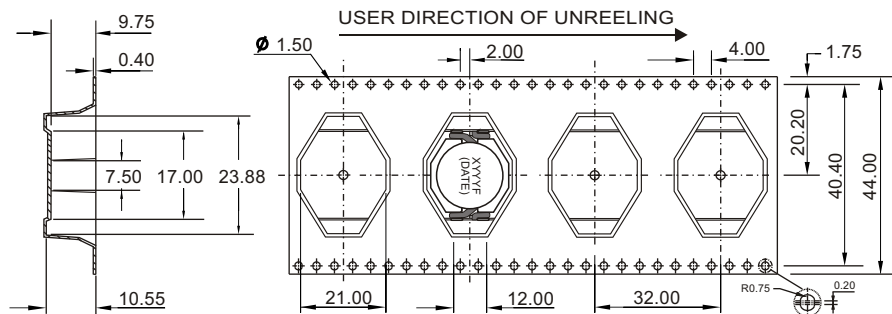
8. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in inches.  
9. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 10 typ.
Tape & Reel	: 140 / reel

SCHEMATIC



PACKAGING



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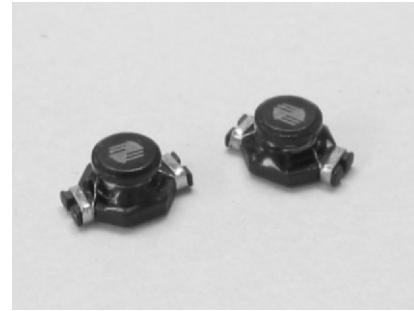
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Website: <http://www.eleceltek.com> / [www.eemagnetic.com](http://www.eemagnetic.com)

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-  Suitable for DC/DC conversions in notebook computers, PDAs and plantops
-  Low DCR and Low profile
-  Unshielded and self-leaded design for pick and place handling
-  Open construction provides stable inductance for increasing currents.
-  RoHS compliant



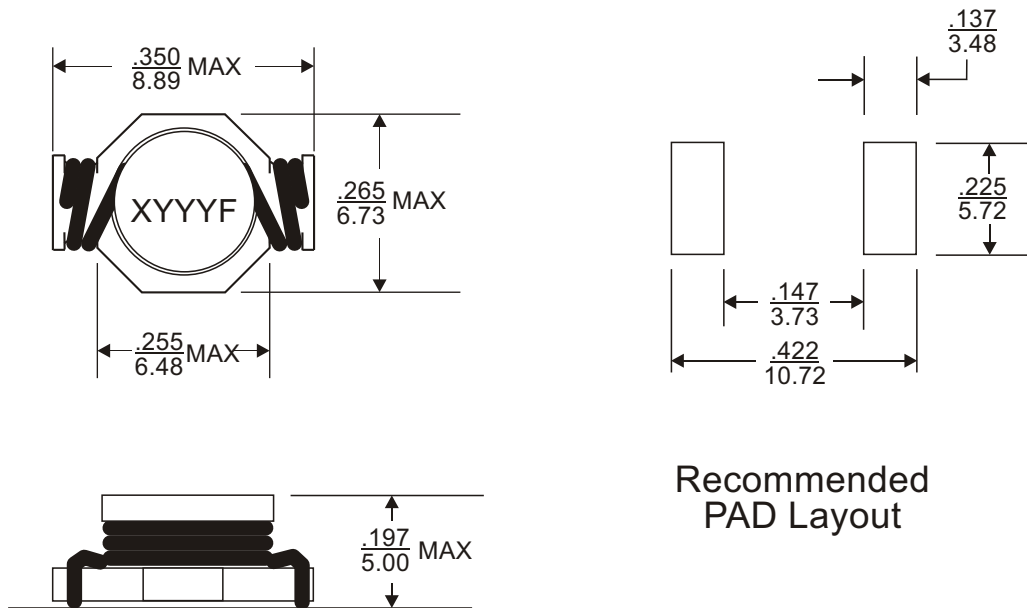
**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Inductance <sup>2</sup> L ( H)	Inductance Tolerance(%)	Test frequency (kHz)	DCR (m ) Max	Isat <sup>3</sup> (A)	Irms <sup>4</sup> (A)	Marking (YYYY)
		M					
UIS0403M-561F	0.56	± 20	100	9.7	7.70	6.00	M561
UIS0403M-102F	1.00	± 20	100	14.0	5.30	4.40	M102
UIS0403M-152F	1.50	± 20	100	22.0	4.50	4.20	M152
UIS0403M-252F	2.50	± 20	100	24.5	3.50	3.50	M252
UIS0403M-332F	3.33	± 20	100	42.6	3.00	2.90	M332
UIS0403M-442F	4.44	± 20	100	51.5	2.50	2.20	M442
UIS0403M-233F	23.5	± 20	100	200	1.10	1.00	M233

**Notes:**

- Ordering Information: UIS0403a - bbbFc.  
UIS0403 = Product Type.  
a = Tolerance of Inductance (M= ±20%).  
bbb = Inductance value in uH (i.e. 561 = 0.56uH; 252 = 2.50uH; 233 = 23.5uH).  
F = Internal Control Code.  
c = Packaging Code (T = Tape & Reel Packaging in 13 inch).
- Test frequency is specified as the frequency for measuring the inductance at 0.25Vrms.
- Inductance drops 10% typical at Isat.
- Temperature rise is 40°C typical at Irms.
- Operating temperature range: -40°C to +125°C.
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

## MECHANICAL DIMENSIONS



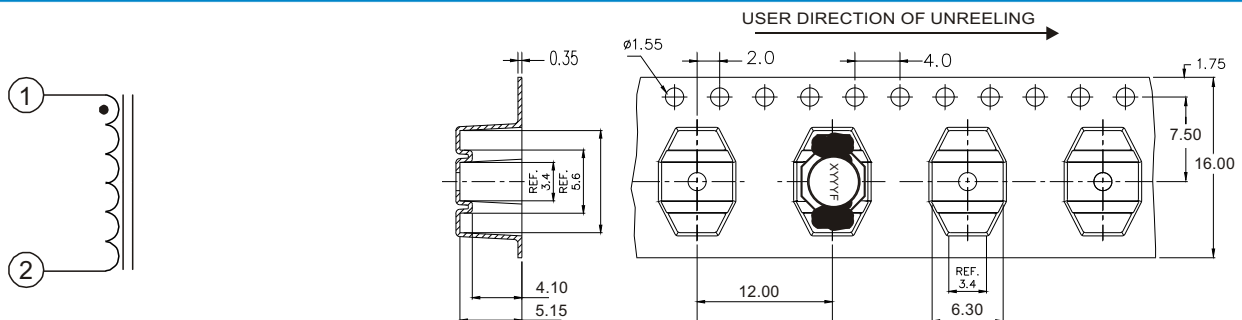
Notes:

7. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in inches.
8. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram) : 0.8 typ.  
Tape & Reel : 1000 / reel

## SCHEMATIC

## PACKAGING



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Email: eempl@eleceltek.com

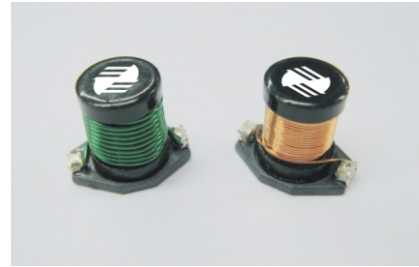
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- Clip pin termination.
- Footprint: 13.0mm x 9.4 mm Max.
- Current Rating: up to 4.9A.
- Inductance Range: 10 H to 1000 H.
- RoHS compliant.



ELECTRICAL SPECIFICATION @ 25°C

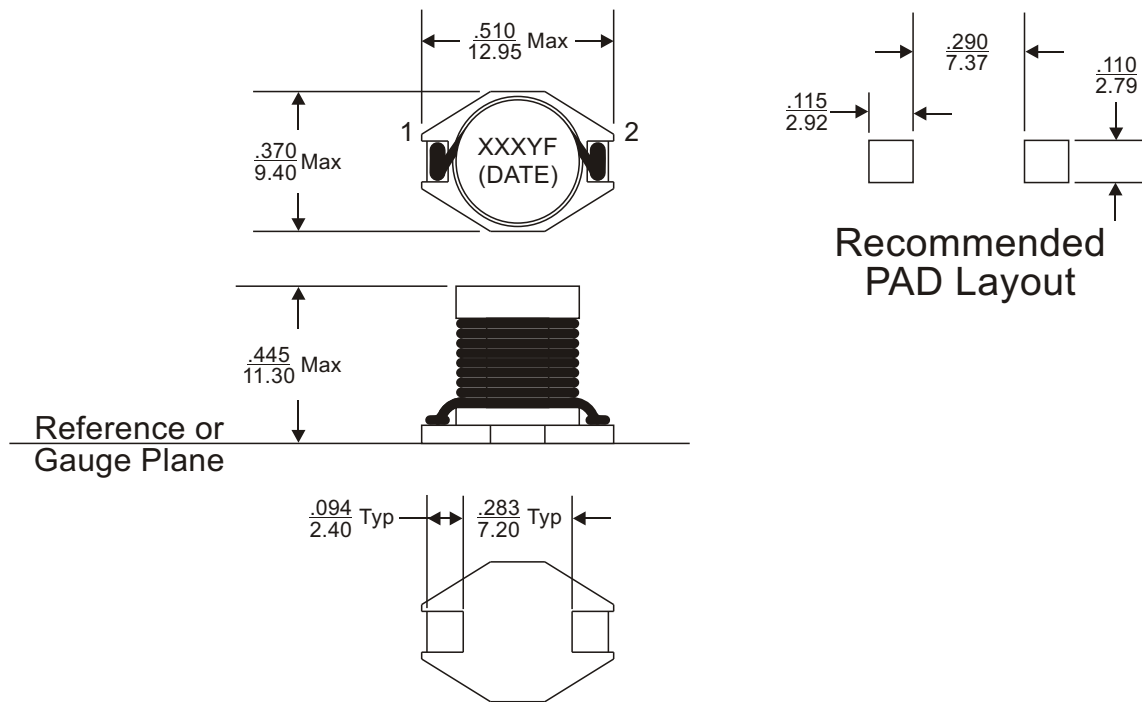
E & E Part Number UIS1311-XXXMF	Inductance <sup>2</sup> ( H)	Inductance Tolerance	I <sub>rated</sub> <sup>3</sup> (A)	DCR (m Ω) Max.	I <sub>sat</sub> <sup>4</sup> (A)	I <sub>rms</sub> <sup>5</sup> (A)	SRF <sup>6</sup> (MHz) Typ.	Marking (XXXMF)
		M						
UIS1311-103MF	10	±20%	4.90	24	8.3	4.90	19	103MF
UIS1311-153MF	15	±20%	4.50	29	7.1	4.50	15	153MF
UIS1311-183MF	18	±20%	4.20	30	5.8	4.20	13	183MF
UIS1311-223MF	22	±20%	3.50	47	5.6	3.50	12	223MF
UIS1311-333MF	33	±20%	2.80	65	4.3	2.80	9	333MF
UIS1311-473MF	47	±20%	2.45	85	3.8	2.45	7	473MF
UIS1311-683MF	68	±20%	2.00	130	3.1	2.00	6	683MF
UIS1311-104MF	100	±20%	1.60	200	2.6	1.60	4.8	104MF
UIS1311-154MF	150	±20%	1.32	280	2.1	1.32	3.5	154MF
UIS1311-224MF	220	±20%	1.13	360	1.7	1.13	2.8	224MF
UIS1311-334MF	330	±20%	0.95	580	1.35	0.95	2.3	334MF
UIS1311-474MF	470	±20%	0.75	860	1.15	0.75	1.7	474MF
UIS1311-684MF	680	±20%	0.60	1200	1.05	0.60	1.5	684MF
UIS1311-105MF	1000	±20%	0.49	2000	0.85	0.49	1.2	105MF

**Notes:**

- Ordering Information: UIS1311- bbbaFc.  
UIS1311 = Product Type.  
bbb = Inductance value in uH (i.e. 223 = 22uH; 224 = 220uH; 105 = 1000uH).  
a = Tolerance of Inductance (M = ±20%).  
F = Internal Control Code.  
c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).
- Inductance is tested at 100kHz, 0.1Vrms.
- The rated current listed is the lower of the saturation current at 25°C or the heating current.
- The saturation current, I<sub>sat</sub>, is the current at which the inductance of the component drops by 10% typical at ambient temperature of 25°C.
- The heating current, I<sub>rms</sub>, is the current required to raise the component temperature by approximately 40°C at ambient temperature of 25°C. The current is determined by mounting the component on a typical application PCB and applying the current to the device for 30 minutes.
- Self-resonant frequency is for reference only.
- Operating temperature range: -40°C to +125°C.
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



**SCHEMATICS**

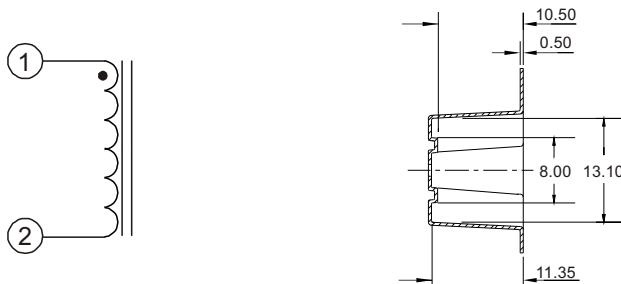


**Notes:**

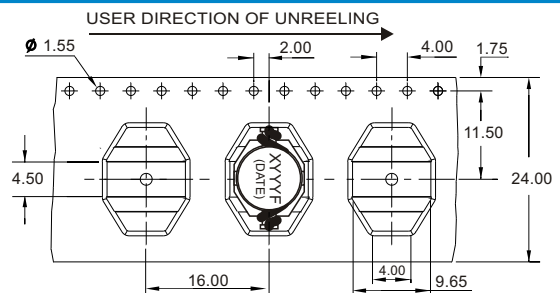
9. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in inches.
10. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$

Weight (in gram)	: 2.5 typ.
Tape & Reel	: 250 / reel

**SCHEMATIC**



**PACKAGING**



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-  Suitable for DC/DC conversions in notebook computers, PDAs and plantops
-  Low DCR and Low profile
-  Unshielded and self-leaded design for pick and place handling
-  Open construction provides stable inductance for increasing currents.
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Inductance <sup>2</sup> L ( H)	Inductance Tolerance(%)	Test frequency (kHz)	DCR ( ) Max	Isat <sup>3</sup> (A)	Irms (A)	SRF (MHz) Typ	Marking (XYYY)
		M						
UIS1704M-122R	1.2	± 20	100	0.08	2.1	3.6	190	M122
UIS1704M-152R	1.5	± 20	100	0.10	1.9	2.8	140	M152
UIS1704M-222R	2.2	± 20	100	0.12	1.6	2.4	115	M222
UIS1704M-332R	3.3	± 20	100	0.16	1.3	2.0	90	M332
UIS1704M-472R	4.7	± 20	100	0.20	1.1	1.7	88	M472
UIS1704M-682R	6.8	± 20	100	0.32	0.90	1.2	66	M682
UIS1704M-103R	10	± 20	100	0.41	0.80	1.1	55	M103
UIS1704M-153R	15	± 20	100	0.55	0.65	0.90	42	M153
UIS1704M-223R	22	± 20	100	0.85	0.50	0.83	38	M223
UIS1704M-333R	33	± 20	100	1.30	0.40	0.62	29	M333
UIS1704M-473R	47	± 20	100	1.80	0.35	0.52	22	M473
UIS1704M-683R	68	± 20	100	2.50	0.30	0.35	18	M683
UIS1704M-104R	100	± 20	100	3.50	0.25	0.27	14	M104
UIS1704M-154R	150	± 20	100	5.00	0.18	0.24	12	M154
UIS1704M-224R	220	± 20	100	7.00	0.16	0.23	10	M224
UIS1704M-334R	330	± 20	100	15.00	0.13	0.13	8	M334

**Notes:**

1. Ordering Information: UIS1704a - bbbRc.

UIS1704 = Product Type.

a = Tolerance of Inductance (M= ±20%).

bbb = Inductance value in uH (i.e. 152 = 1.5uH; 153 = 15uH; 154 = 150uH).

R = Internal Control Code.

c = Packaging Code (U = Tape & Reel Packaging in 7 inch).

2. Test frequency is specified as the frequency for measuring the inductance at 0.1Vrms.

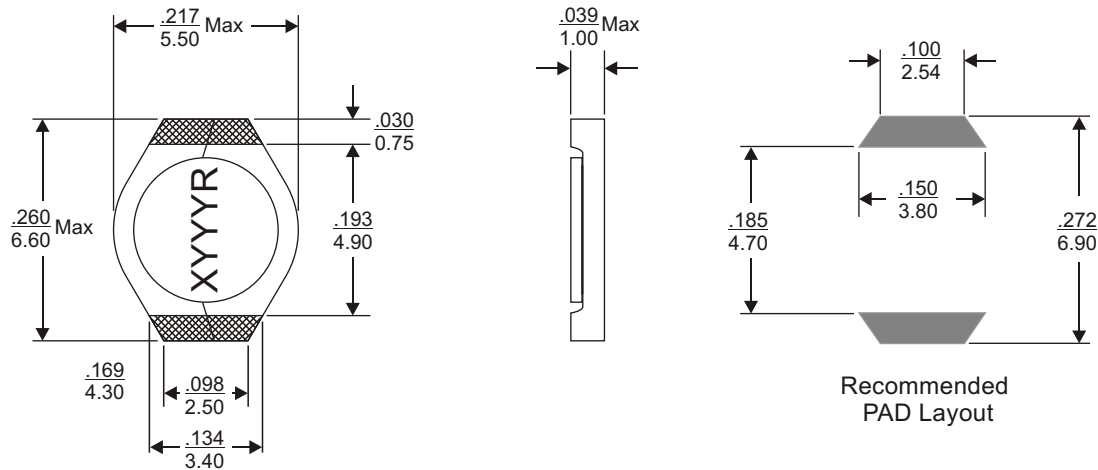
3. Isat is the DC current at which the inductance drops 10% typical from its value without current.

4. Operating temperature range: -40°C to +125°C.

5. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



**MECHANICAL DIMENSIONS**

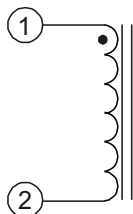


**Notes:**

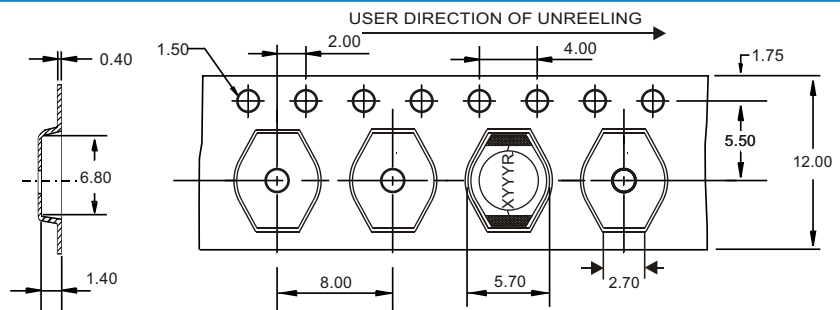
6. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in inches.  
7. Unless otherwise specified, all tolerances are  $\pm 0.010$  /  $\pm 0.25$ .

Weight (in gram)	: 0.1 typ.
Tape & Reel	: 1000 / reel

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-  Designed for high temperature applications.
-  Ideal for many automotive applications.
-  Self-leaded construction for excellent solderability.
-  Low DCR and high current handling.
-  Operating temperature -40 C to +155 C.



**ELECTRICAL SPECIFICATION @ 25°C**

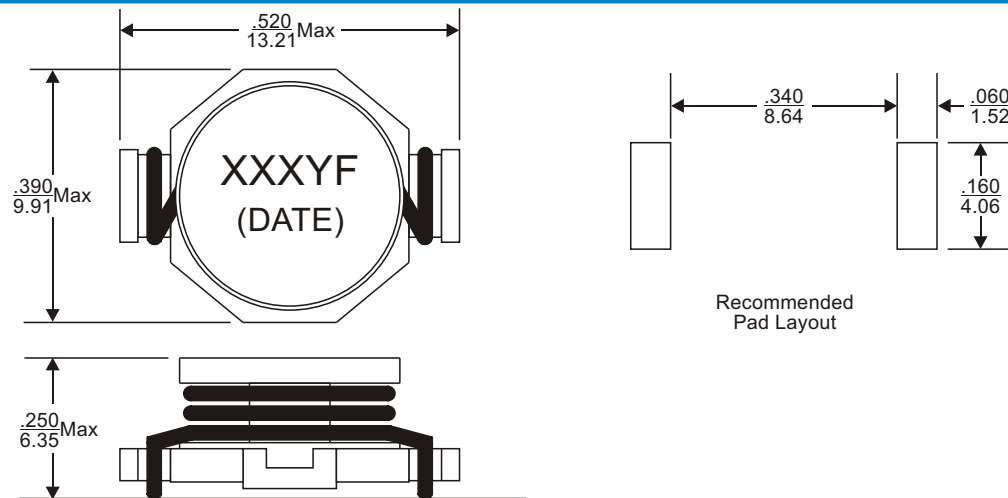
E & E Part Number UIS3316T-XXXMF	Inductance <sup>2</sup> ( H)	Inductance Tolerance	DCR ( ) Max.	SRF (MHz) Typ.	Isat <sup>3</sup> (A)	Irms <sup>4</sup> (A)	Marking (XXXYF)
		M					
UIS3316T-331MF	0.33	±20%	0.002	200	20	16	331MF
UIS3316T-681MF	0.68	±20%	0.005	200	13	12	681MF
UIS3316T-102MF	1.0	±20%	0.006	100	11	10	102MF
UIS3316T-152MF	1.5	±20%	0.008	90	9	9	152MF
UIS3316T-222MF	2.2	±20%	0.011	90	7.8	7.4	222MF
UIS3316T-272MF	2.7	±20%	0.012	65	7.0	6.6	272MF
UIS3316T-332MF	3.3	±20%	0.014	60	6.4	5.9	332MF
UIS3316T-392MF	3.9	±20%	0.015	50	5.9	5.3	392MF
UIS3316T-472MF	4.7	±20%	0.018	50	5.4	4.8	472MF
UIS3316T-562MF	5.6	±20%	0.021	45	4.7	4.65	562MF
UIS3316T-682MF	6.8	±20%	0.024	43	4.4	4.40	682MF
UIS3316T-822MF	8.2	±20%	0.032	34	4.0	4.15	822MF
UIS3316T-103MF	10	±20%	0.034	31	3.9	3.90	103MF
UIS3316T-123MF	12	±20%	0.036	27	3.4	3.50	123MF
UIS3316T-153MF	15	±20%	0.045	25	3.1	3.10	153MF
UIS3316T-183MF	18	±20%	0.050	22	2.8	2.90	183MF
UIS3316T-223MF	22	±20%	0.070	18	2.5	2.70	223MF
UIS3316T-273MF	27	±20%	0.085	18	2.3	2.30	273MF
UIS3316T-333MF	33	±20%	0.100	17	2.0	2.10	333MF
UIS3316T-393MF	39	±20%	0.120	15	1.8	1.95	393MF
UIS3316T-473MF	47	±20%	0.150	14	1.65	1.80	473MF
UIS3316T-563MF	56	±20%	0.165	12	1.45	1.65	563MF
UIS3316T-683MF	68	±20%	0.220	11	1.40	1.50	683MF
UIS3316T-823MF	82	±20%	0.250	10	1.30	1.40	823MF
UIS3316T-104MF	100	±20%	0.280	9.0	1.20	1.30	104MF
UIS3316T-124MF	120	±20%	0.400	8.0	1.00	1.00	124MF
UIS3316T-154MF	150	±20%	0.460	6.0	0.90	0.90	154MF
UIS3316T-184MF	180	±20%	0.520	6.0	0.85	0.85	184MF
UIS3316T-224MF	220	±20%	0.700	5.0	0.80	0.80	224MF
UIS3316T-274MF	270	±20%	0.800	5.0	0.75	0.70	274MF
UIS3316T-334MF	330	±20%	1.07	4.5	0.60	0.60	334MF
UIS3316T-394MF	390	±20%	1.14	4.0	0.62	0.55	394MF
UIS3316T-474MF	470	±20%	1.27	3.5	0.50	0.50	474MF

**Notes:**

- Ordering Information: UIS3316T- bbbaFc.  
UIS3316T = Product Type.  
bbb = Inductance value in uH (i.e. 331 = 0.33uH; 332 = 3.3uH; 333 = 33uH; 334 = 330uH).  
a = Tolerance of Inductance (M = ±20%).  
F = Internal Control Code.  
c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).
- Inductance is tested at 100kHz, 0.1Vrms.
- Saturation current, Isat, is the current at which the inductance of the component drops by 10% typical at an ambient temperature of 25 C.
- Heating current, Irms, is the current required to raise the part temperature by approximately 40 C. The heating current is determined by mounting the component on a typical PCB and applying current for 30 minutes.



### MECHANICAL DIMENSIONS

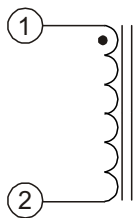


#### Notes:

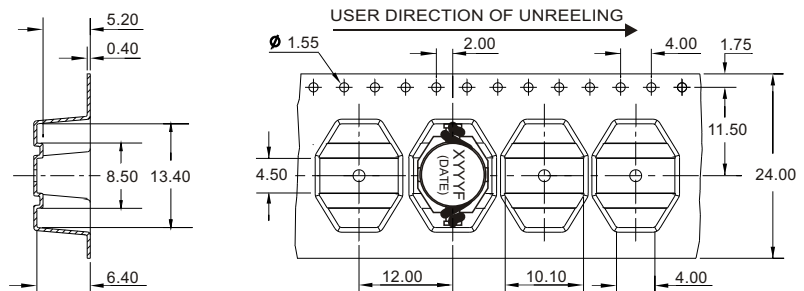
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
- All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in inches.
- Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 1.0 typ.
Tape & Reel	: 800 / reel

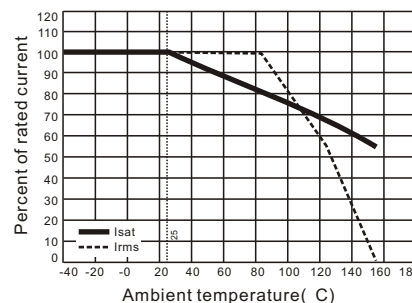
### SCHEMATIC



### PACKAGING



### Current Derating



### FOR MORE INFORMATION, PLEASE CONTACT

#### HEADQUARTER

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-  Suitable for DC/DC converters, industrial products and handheld devices.
-  Unshielded and small footprint with high energy storage and low resistance
-  Superior performance and self-leaded design for surface mounting applications
-  Operating temperature -40 C to +125 C
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

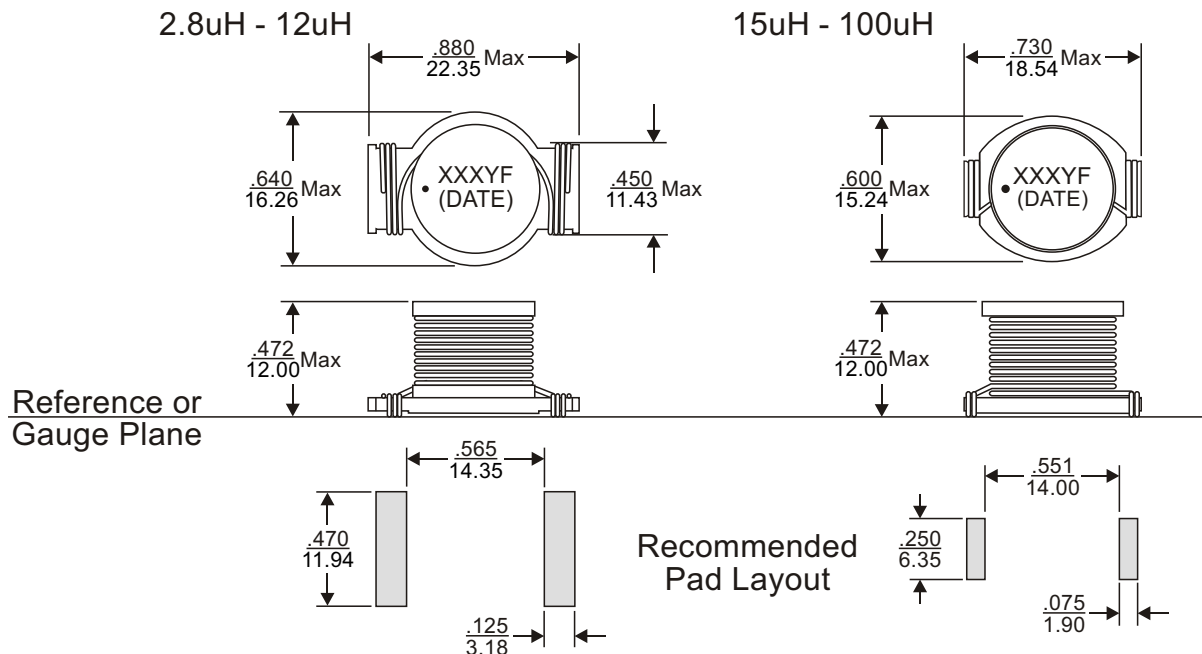
Part Number	Inductance <sup>2</sup> L ( H )	Inductance Tolerances(%)	DCR (m ) Max	SRF (MHz) Typ.	Isat <sup>3</sup> (A)	Irms <sup>4</sup> (A)	Marking (XXXY)
		M					
UIS5005-282MF	2.8	±20	5.2	65	33.4	12.1	282M
UIS5005-392MF	3.9	±20	6.0	40	26.8	11.2	392M
UIS5005-682MF	6.8	±20	9.0	30	22.5	9.6	682M
UIS5005-103MF	10	±20	11	22	17.8	8.6	103M
UIS5005-123MF	12	±20	13	21	15.9	7.4	123M
UIS5005-153MF	15	±20	20	18	13.8	6.5	153M
UIS5005-183MF	18	±20	22	14	13.2	6.0	183M
UIS5005-223MF	22	±20	24	13	11.8	5.7	223M
UIS5005-333MF	33	±20	37	10	9.6	4.5	333M
UIS5005-473MF	47	±20	52	8.0	7.8	3.7	473M
UIS5005-683MF	68	±20	67	7.0	6.7	3.4	683M
UIS5005-104MF	100	±20	115	6.0	5.6	2.8	104M

**Notes:**

- Ordering Information: UIS5005 - bbbaFc.  
UIS5005 = Product Type.  
a = Tolerance of Inductance (M = ±20%).  
bbb = Inductance value in uH (i.e. 682 = 6.8uH; 683 = 68uH; 104 = 100uH)  
F = Internal Control Code.  
c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).
- Inductance is tested at 100kHz, 0.1Vrms, 0Adc.
- Saturation current, Isat, is the current at which the inductance of the component drops by 10% typical at an ambient temperature of 25 C.
- Heating current, Irms, is the current required to raise the component temperature by approximately 40 C. The heating current is determined by mounting the component on a typical PCB and applying current for 30 minutes.
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



**MECHANICAL DIMENSIONS**

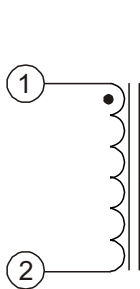


**Notes:**

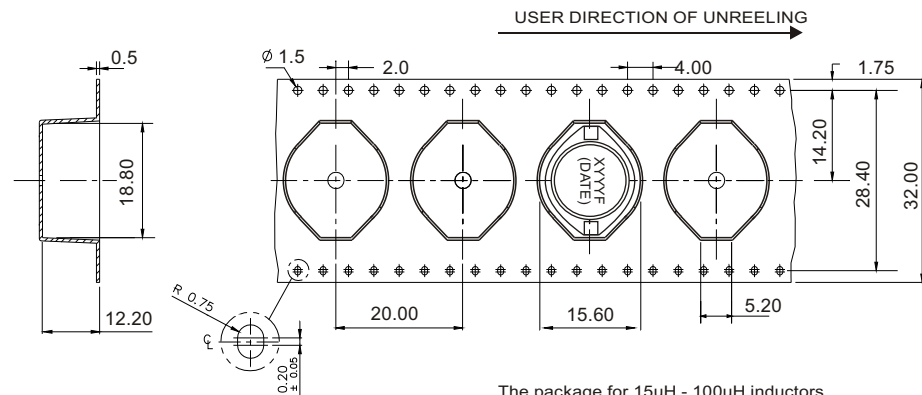
5. All dimensions are specified in inches with higher precedence in mm.
6. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 7.0 typ.
Tape & Reel	: 160 / reel

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**FOR MORE INFORMATION, PLEASE CONTACT**

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-  Suitable for DC/DC converters, industrial products and handheld devices.
-  Unshielded and small footprint with high energy storage and low resistance
-  Superior performance and self-leaded design for surface mounting applications
-  Operating temperature -40 C to +125 C
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

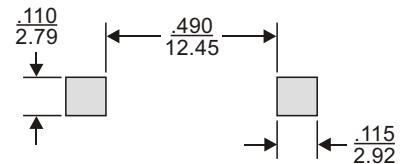
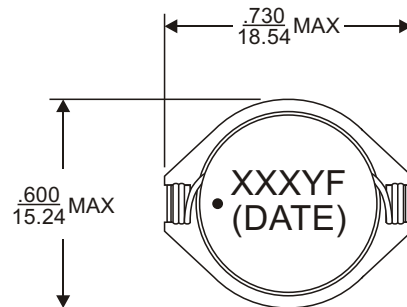
Part Number	Inductance <sup>2</sup> @0A <sub>DC</sub> ( H )	Inductance Tolerances (%)	Inductance <sup>3</sup> @ I <sub>rated</sub> ( H Typ.)	I <sub>rated</sub> <sup>4</sup> (A)	DCR (m Ω) Max	Saturation <sup>5</sup> Current I <sub>sat</sub> (A)	Heating <sup>6</sup> Current I <sub>DC</sub> (A)	Marking (XXXY)
		M						
UIS5015-681MF	0.68	±20	0.68	20.0	2.0	64	20.0	681M
UIS5015-122MF	1.2	±20	1.2	17.7	2.6	48	17.7	122M
UIS5015-222MF	2.2	±20	2.2	14.7	3.7	35	14.7	222M
UIS5015-332MF	3.3	±20	3.3	13.7	4.3	29	13.7	332M
UIS5015-392MF	3.9	±20	3.9	11.7	6.7	26	11.7	392M
UIS5015-472MF	4.7	±20	4.7	10.8	6.9	24	10.8	472M
UIS5015-682MF	6.8	±20	6.8	9.0	9.8	20	9.0	682M
UIS5015-103MF	10	±20	10	7.1	15	16	7.1	103M
UIS5015-183MF	18	±20	18	6.0	25	13	6.0	183M
UIS5015-223MF	22	±20	22	5.4	27	11	5.4	223M
UIS5015-333MF	33	±20	33	4.4	42	9	4.4	333M
UIS5015-403MF	40	±20	40	4.0	50	8	4.0	403M
UIS5015-473MF	47	±20	47	3.5	55	7	3.5	473M
UIS5015-104MF	100	±20	100	2.3	153	5	2.3	104M
UIS5015-154MF	150	±20	150	2	200	4	2	154M

**Notes:**

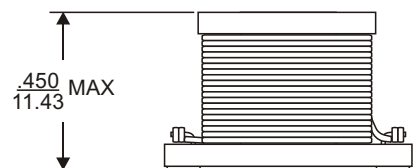
- Ordering Information: UIS5015 - bbbaFc.  
UIS5015 = Product Type.  
a = Tolerance of Inductance (M = ±20%).  
bbb = Inductance value in uH (i.e. 681 = 0.68uH; 682 = 6.8uH; 473 = 47uH; 154 = 150uH)  
F = Internal Control Code.  
c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).
- Inductance is tested at 100kHz, 0.1V<sub>rms</sub>.
- Inductance at I<sub>rated</sub> is a typical inductance value of the inductor at rated current.
- The rated current listed is the lower of the saturation current at 25°C or the heating current.
- Saturation current, I<sub>sat</sub>, is the current at which the inductance of the component drops by 20% maximum at an ambient temperature of 25 C.
- Heating current, IDC, is the DC current required to raise the part temperature by approximately 40 C. The heating current is determined by mounting the component on a typical PCB and applying current for 30 minutes.
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



**MECHANICAL DIMENSIONS**



**Recommended  
Pad Layout**



**Reference or  
Gauge Plane**

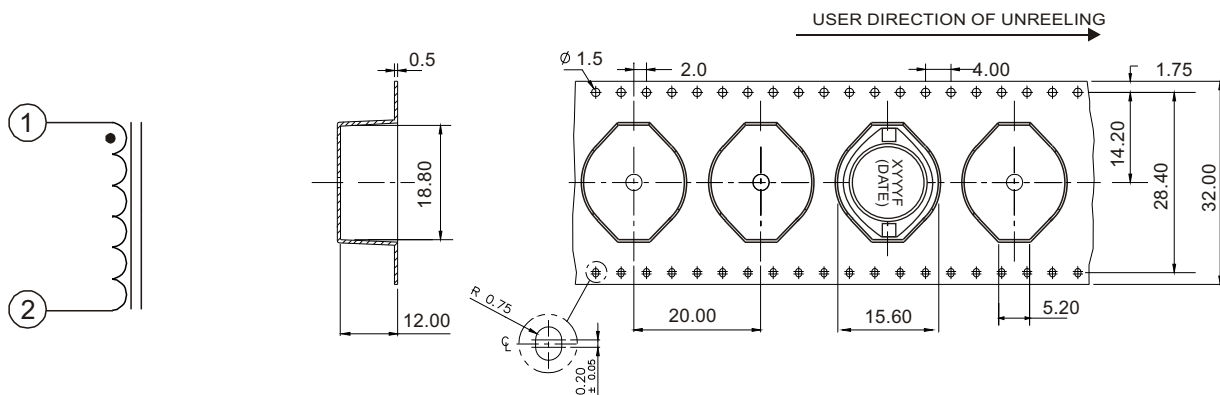
**Notes:**

8. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in inches.
9. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 6.0 typ.
Tape & Reel	: 200 / reel

**SCHEMATIC**

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**FOR MORE INFORMATION, PLEASE CONTACT**

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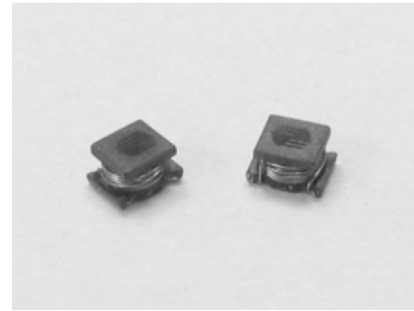
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-  Suitable for DC/DC conversions in portable computers, VCR or other communication equipments.
-  High performance and small size with low profile
-  Unshielded and self-leaded design for pick and place handling
-  Inductance range from 1 to 2200 micro H
-  RoHS compliant

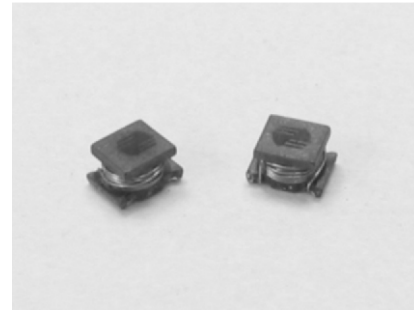


**ELECTRICAL SPECIFICATION @ 25°C**

Part  Number	Inductance		Inductance			Quality Factor		SRF	DCR	Rated dc <sup>4</sup>	Marking		
	Ls  (uH)	Test <sup>2</sup> Freq. (Hz)	Tolerance (%)			Q  Typ.	Test <sup>3</sup> Freq. (Hz)				( MHz)	(   )	Current  (mA)
			J	K	M			J	K	M			
UISH4NM-1R0F	1.0	1M	N/A	N/A	±20	20	1M	120	0.20	500	N/A	N/A	M1R0
UISH4NM-1R2F	1.2	1M	N/A	N/A	±20	20	1M	100	0.20	500	N/A	N/A	M1R2
UISH4NM-1R5F	1.5	1M	N/A	N/A	±20	20	1M	85	0.30	500	N/A	N/A	M1R5
UISH4NM-1R8F	1.8	1M	N/A	N/A	±20	20	1M	75	0.30	500	N/A	N/A	M1R8
UISH4NM-2R2F	2.2	1M	N/A	N/A	±20	20	1M	62	0.30	500	N/A	N/A	M2R2
UISH4NM-2R7F	2.7	1M	N/A	N/A	±20	20	1M	53	0.32	500	N/A	N/A	M2R7
UISH4NM-3R3F	3.3	1M	N/A	N/A	±20	20	1M	47	0.35	500	N/A	N/A	M3R3
UISH4NM-3R9F	3.9	1M	N/A	N/A	±20	20	1M	41	0.38	500	N/A	N/A	M3R9
UISH4NX-4R7F	4.7	1M	N/A	±10	±20	30	1M	38	0.40	500	N/A	K4R7	M4R7
UISH4NX-5R6F	5.6	1M	N/A	±10	±20	30	1M	33	0.47	500	N/A	K5R6	M5R6
UISH4NX-6R8F	6.8	1M	N/A	±10	±20	30	1M	31	0.50	450	N/A	K6R8	M6R8
UISH4NX-8R2F	8.2	1M	N/A	±10	±20	30	1M	27	0.56	450	N/A	K8R2	M8R2
UISH4NX-100F	10	1M	±5	±10	N/A	35	1M	23	0.56	400	J100	K100	N/A
UISH4NX-120F	12	1M	±5	±10	N/A	35	1M	21	0.62	380	J120	K120	N/A
UISH4NX-150F	15	1M	±5	±10	N/A	35	1M	19	0.73	360	J150	K150	N/A
UISH4NX-180F	18	1M	±5	±10	N/A	35	1M	17	0.82	340	J180	K180	N/A
UISH4NX-220F	22	1M	±5	±10	N/A	35	1M	15	0.94	320	J220	K220	N/A
UISH4NX-270F	27	1M	±5	±10	N/A	35	1M	14	1.1	300	J270	K270	N/A
UISH4NX-330F	33	1M	±5	±10	N/A	35	1M	12	1.2	270	J330	K330	N/A
UISH4NX-390F	39	1M	±5	±10	N/A	35	1M	11	1.4	240	J390	K390	N/A
UISH4NX-470F	47	1M	±5	±10	N/A	35	1M	10	1.5	220	J470	K470	N/A
UISH4NX-560F	56	1M	±5	±10	N/A	35	1M	9.3	1.7	200	J560	K560	N/A
UISH4NX-680F	68	1M	±5	±10	N/A	35	1M	8.4	1.9	180	J680	K680	N/A
UISH4NX-820F	82	1M	±5	±10	N/A	35	1M	7.5	2.2	170	J820	K820	N/A
UISH4NX-101F	100	1M	±5	±10	N/A	40	796k	6.8	2.5	160	J101	K101	N/A



-  Suitable for DC/DC conversions in portable computers, VCR or other communication equipments.
-  High performance and small size with low profile
-  Unshielded and self-leaded design for pick and place handling
-  Inductance range from 1 to 2200 micro H
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

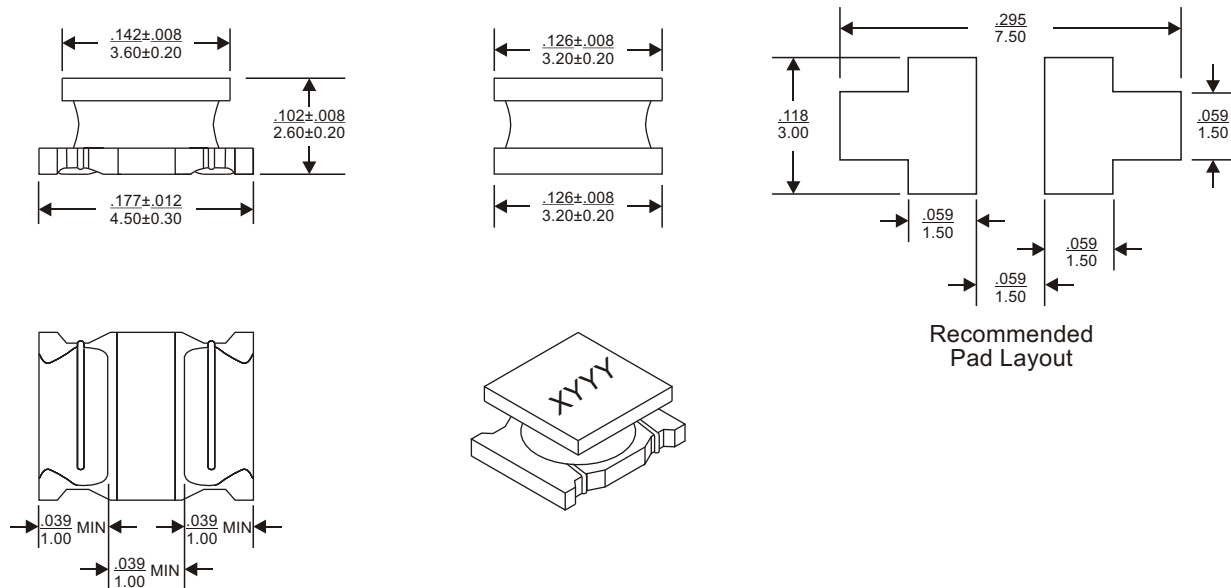
Part Number	Inductance		Inductance Tolerance (%)			Quality Factor		SRF	DCR	Rated dc <sup>4</sup> Current	Marking (XXXX)		
	Ls (uH)	Test Freq. (Hz)	Tolerance (%)			Q Typ.	Test Freq. (Hz)	(MHz) Typ.	( ) Max	(mA)	Marking (XXXX)		
			J	K	M						J	K	M
UISH4NX-121F	120	1M	±5	±10	N/A	40	796k	6.2	3.0	150	J121	K121	N/A
UISH4NX-151F	150	1M	±5	±10	N/A	40	796k	5.5	3.7	130	J151	K151	N/A
UISH4NX-181F	180	1M	±5	±10	N/A	40	796k	5.0	4.5	120	J181	K181	N/A
UISH4NX-221F	220	1M	±5	±10	N/A	40	796k	4.5	5.4	110	J221	K221	N/A
UISH4NX-271F	270	1M	±5	±10	N/A	40	796k	4.0	6.8	100	J271	K271	N/A
UISH4NX-331F	330	1M	±5	±10	N/A	40	796k	3.6	8.2	95	J331	K331	N/A
UISH4NX-391F	390	1M	±5	±10	N/A	40	796k	3.3	9.7	90	J391	K391	N/A
UISH4NX-471F	470	1k	±5	±10	N/A	40	796k	3.0	11.8	80	J471	K471	N/A
UISH4NX-561F	560	1k	±5	±10	N/A	40	796k	2.7	14.5	70	J561	K561	N/A
UISH4NX-681F	680	1k	±5	±10	N/A	40	796k	2.5	17.0	65	J681	K681	N/A
UISH4NX-821F	820	1k	±5	±10	N/A	40	796k	2.2	20.5	60	J821	K821	N/A
UISH4NX-102F	1000	1k	±5	±10	N/A	40	252k	2.0	25.0	50	J102	K102	N/A
UISH4NX-122F	1200	1k	±5	±10	N/A	40	252k	1.8	30.0	45	J122	K122	N/A
UISH4NX-152F	1500	1k	±5	±10	N/A	40	252k	1.6	37.0	40	J152	K152	N/A
UISH4NX-182F	1800	1k	±5	±10	N/A	40	252k	1.5	45.0	35	J182	K182	N/A
UISH4NX-222F	2200	1k	±5	±10	N/A	40	252k	1.3	50.0	30	J222	K222	N/A

**Notes:**

- Ordering Information: UISH4NXa - bbbFc.  
 UISH4NX = Product Type.  
 a = Tolerance of Inductance (J = ±5%; K = ±10%; M = ±20%).  
 bbb = Inductance value in uH (i.e. 4R7 = 4.7uH; 470 = 47uH; 471 = 470uH; 152 = 1500uH).  
 F = Internal Control Code.  
 c = Packaging Code (U = Tape & Reel Packaging in 7 inch Reel).
- Test frequency is specified as the frequency for measuring the inductance.
- Test frequency is specified as the frequency for measuring the Q value.
- Inductance drops by 10% typical at rated DC current.
- Operating temperature range: -40°C to +125°C.
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



**MECHANICAL DIMENSIONS**

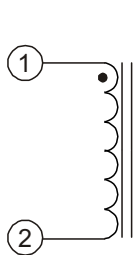


**Notes:**

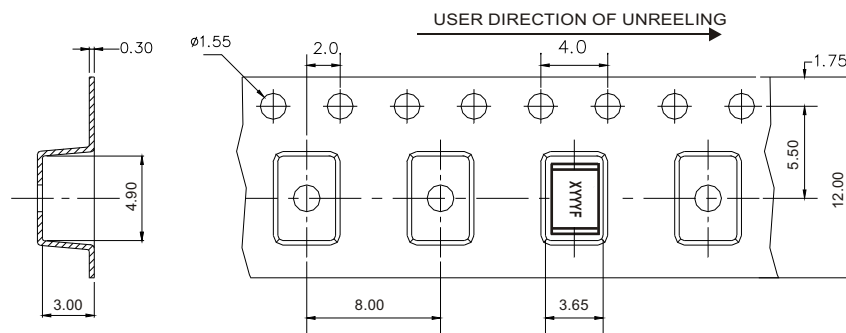
7. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
8. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{.25}$ .

Weight (in gram)	: 0.2 typ.
Tape & Reel	: 700 / reel

**SCHEMATIC**



**PACKAGING**



**FOR MORE INFORMATION, PLEASE CONTACT**

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-  Operating frequency up to 3MHz.
-  Inductance range from 1 to 2700 micro H
-  High performance and small size with low profile
-  Suitable for DC/DC conversions in portable computers, VCR or other communication equipments.
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Inductance <sup>2</sup> (uH)	Inductance Tolerance (%)	DCR (m Ω)	SRF (MHz)	Rated <sup>3</sup> Current (A)	Marking (YYYY)
		K	Typ.	Typ.		
UISHM612K-100F	10	±10	65	25	2.70	K100
UISHM612K-120F	12	±10	70	22	2.50	K120
UISHM612K-150F	15	±10	90	20	2.20	K150
UISHM612K-180F	18	±10	100	16	2.00	K180
UISHM612K-220F	22	±10	110	15	1.80	K220
UISHM612K-270F	27	±10	130	14	1.60	K270
UISHM612K-330F	33	±10	150	13	1.50	K330
UISHM612K-390F	39	±10	180	12	1.30	K390
UISHM612K-470F	47	±10	200	11	1.20	K470
UISHM612K-560F	56	±10	250	9	1.10	K560
UISHM612K-680F	68	±10	280	8	1.00	K680
UISHM612K-820F	82	±10	350	7.5	0.90	K820
UISHM612K-101F	100	±10	450	7	0.84	K101
UISHM612K-121F	120	±10	500	6.5	0.77	K121
UISHM612K-151F	150	±10	650	6.2	0.69	K151
UISHM612K-181F	180	±10	750	6	0.62	K181
UISHM612K-221F	220	±10	950	5.2	0.57	K221
UISHM612K-271F	270	±10	1100	4.5	0.51	K271
UISHM612K-331F	330	±10	1350	4	0.46	K331
UISHM612K-391F	390	±10	1600	3.5	0.43	K391
UISHM612K-471F	470	±10	2000	2.8	0.39	K471
UISHM612K-561F	560	±10	2400	2.7	0.36	K561
UISHM612K-681F	680	±10	2700	2.6	0.32	K681
UISHM612K-821F	820	±10	3600	1.7	0.30	K821
UISHM612K-102F	1000	±10	4300	1.6	0.27	K102



-  Operating frequency up to 3MHz.
-  Inductance range from 1 to 2700 micro H
-  High performance and small size with low profile
-  Suitable for DC/DC conversions in portable computers, VCR or other communication equipments.
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

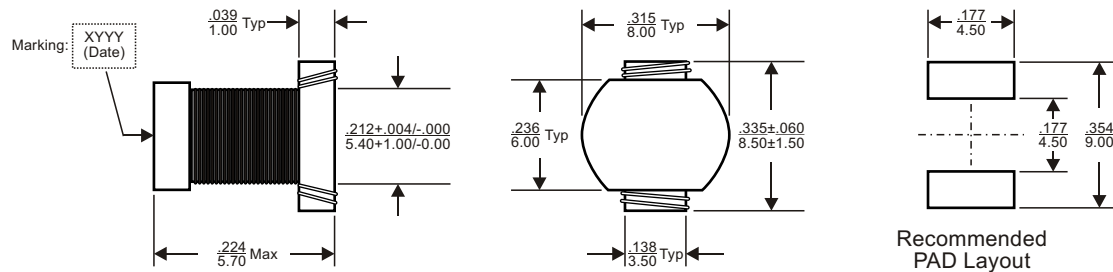
Part Number	Inductance <sup>2</sup> (uH)	Inductance Tolerance (%)	DCR (m )	SRF (MHz)	Rated <sup>3</sup> Current (A)	Marking (YYYY)
		K	Typ.	Typ.		
UISHM612K-122F	1200	±10	5600	1.5	0.25	K122
UISHM612K-152F	1500	±10	6500	1.45	0.22	K152
UISHM612K-182F	1800	±10	7000	1.4	0.20	K182
UISHM612K-222F	2200	±10	9200	1.3	0.18	K222
UISHM612K-272F	2700	±10	10500	1.2	0.16	K272

**Notes:**

- Ordering Information: UISHM612a - bbbFc.  
 UISHM612 = Product Type.  
 a = Tolerance of Inductance ( K = ±10%).  
 bbb = Inductance value in uH (i.e. 470 = 47uH; 471 = 470uH; 152 = 1500uH).  
 F = Internal Control Code.  
 c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).
- Inductance tested at 1kHz, 0.1Vrms with rated DC current.
- Rated current is the maximum DC current at which the inductance will be increased by 10% from its initial(zero DC) value or the current at which  $\Delta T=40^{\circ}\text{C}$ , whichever is lower.
- Operating temperature range:  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$ .
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



MECHANICAL DIMENSIONS



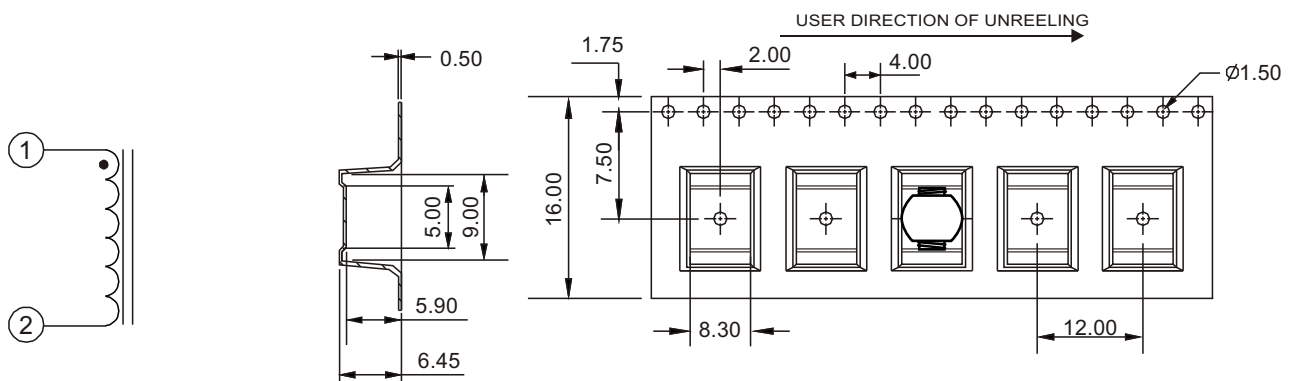
Notes:

6. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.  
7. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{.25}$ .

Weight (in gram)	: 1.0typ.
Tape & Reel	: 750 / reel

SCHEMATIC

PACKAGING



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-  Suitable for VCR, portable communication equipments and other portable handheld devices
-  Unshielded and self-leaded design with flat top for automatic pick-and-place operations
-  Compact design specifically for surface mounting applications
-  Wide inductance range from 3.9 to 100000 micro H
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Inductance <sup>2</sup> (uH)	Inductance Tolerance (%)		DCR ( ) Max.	Saturation <sup>3</sup> Current (Adc)	Rated <sup>4</sup> Current (Adc)	Marking (XXXX)
		K	M				
UISPI1916M-391F	3.9	N/A	±20	7m	24	9.75	M391
UISPI1916M-471F	4.7	N/A	±20	8m	22	9.11	M471
UISPI1916M-561F	5.6	N/A	±20	11m	22	7.77	M561
UISPI1916M-681F	6.8	N/A	±20	11m	20	7.60	M681
UISPI1916M-821F	8.2	N/A	±20	13m	18	7.15	M821
UISPI1916K-102F	10	±10	N/A	16m	17	6.44	K102
UISPI1916K-122F	12	±10	N/A	18m	15	6.07	K122
UISPI1916K-152F	15	±10	N/A	20m	14	5.76	K152
UISPI1916K-182F	18	±10	N/A	22m	12	5.49	K182
UISPI1916K-222F	22	±10	N/A	24m	11	5.26	K222
UISPI1916K-272F	27	±10	N/A	25m	10	5.15	K272
UISPI1916K-332F	33	±10	N/A	28m	9.0	4.87	K332
UISPI1916K-392F	39	±10	N/A	31m	8.3	4.63	K392
UISPI1916K-472F	47	±10	N/A	34m	7.4	4.45	K472
UISPI1916K-562F	56	±10	N/A	43m	7.0	3.93	K562
UISPI1916K-682F	68	±10	N/A	59m	6.4	3.36	K682
UISPI1916K-822F	82	±10	N/A	66m	5.7	3.18	K822
UISPI1916K-103F	100	±10	N/A	84m	5.0	2.82	K103
UISPI1916K-123F	120	±10	N/A	113m	4.8	2.43	K123
UISPI1916K-153F	150	±10	N/A	129m	4.4	2.27	K153
UISPI1916K-183F	180	±10	N/A	150m	4.0	2.11	K183
UISPI1916K-223F	220	±10	N/A	162m	3.6	2.03	K223
UISPI1916K-273F	270	±10	N/A	226m	3.2	1.72	K273
UISPI1916K-333F	330	±10	N/A	257m	2.9	1.61	K333
UISPI1916K-393F	390	±10	N/A	288m	2.7	1.52	K393








-  Suitable for VCR, portable communication equipments and other portable handheld devices
-  Unshielded and self-leaded design with flat top for automatic pick-and-place operations
-  Compact design specifically for surface mounting applications
-  Wide inductance range from 3.9 to 100000 micro H
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Inductance <sup>2</sup> (uH)	Inductance Tolerance (%)		DCR ( ) Max.	Saturation <sup>3</sup> Current (Adc)	Rated <sup>4</sup> Current (Adc)	Marking (YYYY)
		K	M				
UISPI1916K-473F	470	±10	N/A	393m	2.5	1.30	K473
UISPI1916K-563F	560	±10	N/A	504m	2.3	1.15	K563
UISPI1916K-683F	680	±10	N/A	570m	2.0	1.08	K683
UISPI1916K-823F	820	±10	N/A	643m	1.9	1.02	K823
UISPI1916K-104F	1000	±10	N/A	844m	1.7	0.890	K104
UISPI1916K-124F	1200	±10	N/A	977m	1.5	0.825	K124
UISPI1916K-154F	1500	±10	N/A	1.18	1.4	0.750	K154
UISPI1916K-184F	1800	±10	N/A	1.50	1.2	0.665	K184
UISPI1916K-224F	2200	±10	N/A	1.76	1.1	0.615	K224
UISPI1916K-274F	2700	±10	N/A	2.13	1.0	0.560	K274
UISPI1916K-334F	3300	±10	N/A	2.53	0.93	0.510	K334
UISPI1916K-394F	3900	±10	N/A	2.84	0.88	0.480	K394
UISPI1916K-474F	4700	±10	N/A	3.79	0.78	0.415	K474
UISPI1916K-564F	5600	±10	N/A	4.24	0.70	0.395	K564
UISPI1916K-684F	6800	±10	N/A	5.75	0.65	0.340	K684
UISPI1916K-824F	8200	±10	N/A	6.44	0.60	0.320	K824
UISPI1916K-105F	10000	±10	N/A	7.30	0.53	0.300	K105
UISPI1916K-125F	12000	±10	N/A	9.34	0.48	0.265	K125
UISPI1916K-155F	15000	±10	N/A	10.7	0.43	0.250	K155
UISPI1916K-185F	18000	±10	N/A	14.8	0.40	0.210	K185
UISPI1916K-225F	22000	±10	N/A	18.0	0.35	0.190	K225
UISPI1916K-275F	27000	±10	N/A	22.7	0.33	0.170	K275
UISPI1916K-335F	33000	±10	N/A	25.7	0.28	0.160	K335
UISPI1916K-395F	39000	±10	N/A	29.7	0.25	0.150	K395
UISPI1916K-475F	47000	±10	N/A	33.7	0.25	0.140	K475



-  Suitable for VCR, portable communication equipments and other portable handheld devices
-  Unshielded and self-leaded design with flat top for automatic pick-and-place operations
-  Compact design specifically for surface mounting applications
-  Wide inductance range from 3.9 to 100000 micro H
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

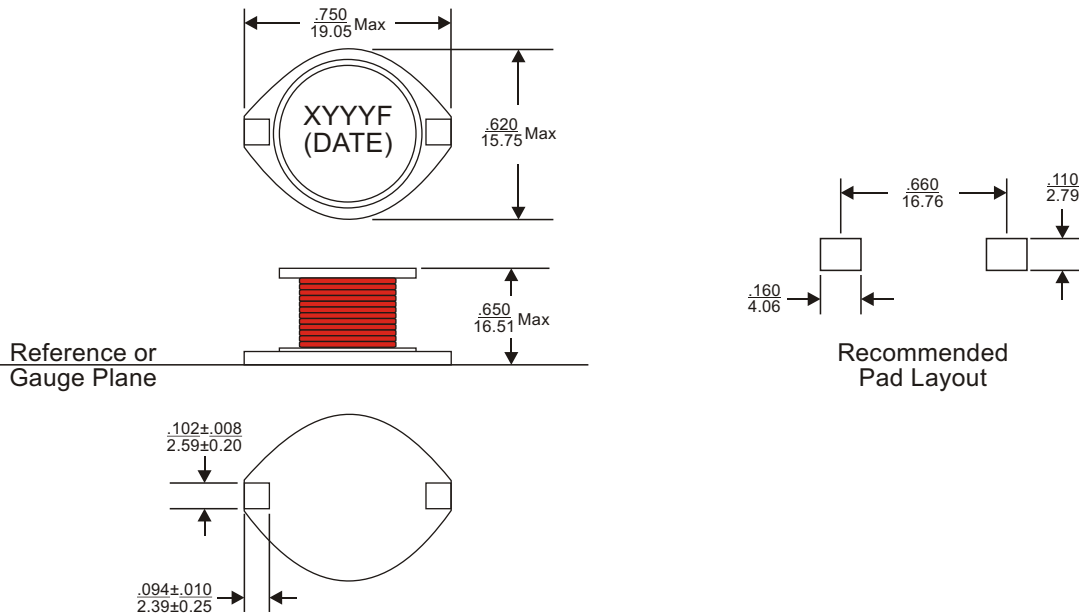
Part Number	Inductance <sup>2</sup> (uH)	Inductance		DCR ( ) Max.	Saturation <sup>3</sup> Current (Adc)	Rated <sup>4</sup> Current (Adc)	Marking (YYYY)
		Tolerance (%)					
		K	M				
UISPI1916K-565F	56000	±10	N/A	38.0	0.23	0.130	K565
UISPI1916K-685F	68000	±10	N/A	52.8	0.21	0.110	K685
UISPI1916K-825F	82000	±10	N/A	67.3	0.19	0.100	K825
UISPI1916K-106F	100000	±10	N/A	76.0	0.17	0.090	K106

**Notes:**

- Ordering Information: UISPI1916a - bbbFc.  
UISPI1916 = Product Type.  
a = Tolerance of Inductance ( K = ±10%, M = ±20%).  
bbb = Inductance value in uH (i.e. 471 = 4.7uH; 472 = 47uH; 473 = 470uH; 474 = 4700uH; 475 = 47000uH; 106 = 100000uH).  
F = Internal Control Code.  
c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).
- Inductance tested at 1kHz.
- Saturation current is the value of dc current that will reduce the initial inductance by 5% typical.
- Rated current is the dc current that based on a 40°C temperature rise at an ambient temperature of 85°C.
- Operating temperature range: -40°C to +125°C.
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



**MECHANICAL DIMENSIONS**



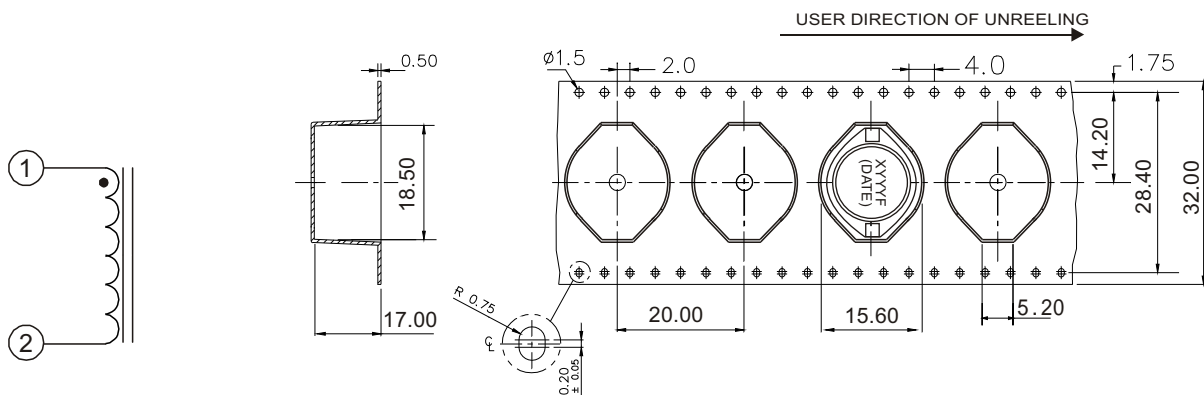
**Notes:**

7. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
8. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{.25}$ .

Weight (in gram)	: 3.0typ.
Tape & Reel	: 120 / reel

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-  Compact design
- Open magnetic circuit construction,
-  Low resistance and high rated current
-  Ideal for use as choke coil for high current DC circuits  
in all types of electronic instrument.
-  Inductance range from 3.9 to 1000 micro H
-  RoHS compliant



ELECTRICAL SPECIFICATION @ 25°C

Part Number	Inductance (uH)	Inductance Tolerance (%)		Qu Min	Q Test Freq. (MHz)	DCR (ohm) Typ	I DC <sup>2</sup> (A)	Marking (XYYY)
		K	M					
UIT494FM-1R0F	1.0	N/A	±20	20	7.96	0.021	6.0	M1R0
UIT494FM-1R5F	1.5	N/A	±20	20	7.96	0.023	5.3	M1R5
UIT494FM-2R2F	2.2	N/A	±20	20	7.96	0.026	4.4	M2R2
UIT494FM-3R3F	3.3	N/A	±20	20	7.96	0.030	3.8	M3R3
UIT494FM-4R7F	4.7	N/A	±20	20	7.96	0.034	3.2	M4R7
UIT494FM-6R8F	6.8	N/A	±20	20	7.96	0.037	2.8	M6R8
UIT494FK-100F	10.0	±10	N/A	50	2.52	0.044	2.3	K100
UIT494FK-120F	12.0	±10	N/A	50	2.52	0.049	2.1	K120
UIT494FK-150F	15.0	±10	N/A	50	2.52	0.054	2.0	K150
UIT494FK-180F	18.0	±10	N/A	40	2.52	0.058	1.8	K180
UIT494FK-220F	22.0	±10	N/A	40	2.52	0.065	1.6	K220
UIT494FK-270F	27.0	±10	N/A	40	2.52	0.072	1.5	K270
UIT494FK-330F	33.0	±10	N/A	30	2.52	0.080	1.4	K330
UIT494FK-390F	39.0	±10	N/A	30	2.52	0.091	1.3	K390
UIT494FK-470F	47.0	±10	N/A	30	2.52	0.101	1.2	K470
UIT494FK-560F	56.0	±10	N/A	30	2.52	0.145	1.0	K560
UIT494FK-680F	68.0	±10	N/A	30	2.52	0.161	0.95	K680
UIT494FK-820F	82.0	±10	N/A	30	2.52	0.174	0.91	K820
UIT494FK-101F	100.0	±10	N/A	20	0.796	0.221	0.79	K101
UIT494FK-121F	120.0	±10	N/A	20	0.796	0.254	0.71	K121
UIT494FK-151F	150.0	±10	N/A	20	0.796	0.294	0.64	K151
UIT494FK-181F	180.0	±10	N/A	20	0.796	0.451	0.56	K181
UIT494FK-221F	220.0	±10	N/A	20	0.796	0.509	0.51	K221

**Notes:**

1. Ordering Information: UIT494Fa - bbbFc.

UIT494F = Product Type.

a = Tolerance of Inductance (K = ±10%; M = ±20%).

bbb = Inductance value in uH (i.e. 4R7 = 4.7uH; 470 = 47uH; 151 = 150uH)

F = Internal Control Code.

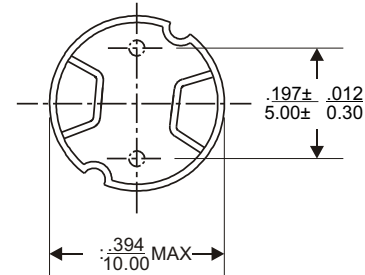
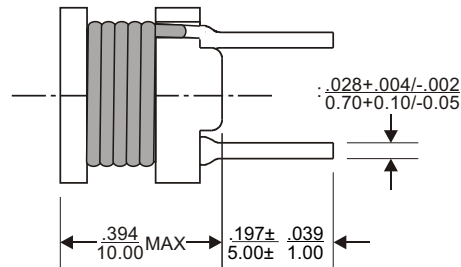
c = Packaging Code (No code = Non Tape & Reel Packaging, i.e. Tray packaging).

2. The rated DC current is that at which the inductance values decreases by 10% by the excitation with DC current.

3. Operating temperature range: -40°C to +125°C.



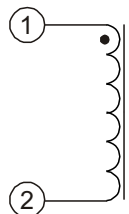
MECHANICAL DIMENSIONS



Notes:

4. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
5. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
6. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{.025}$ .

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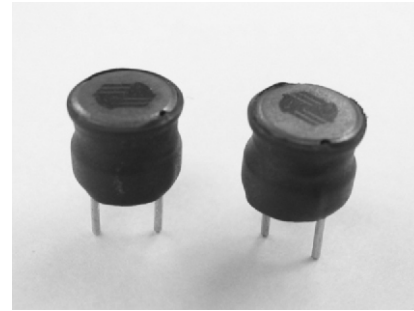
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Website: <http://www.eleceltek.com> / [www.eemagnetic.com](http://www.eemagnetic.com)

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-  Suitable for DC/DC conversions in notebook computers, or as a choke coil for noise filtering.
-  High performance and small size for printed circuit mounting
-  Compact design with high energy storage and low resistance
-  Inductance range from 1 to 1000 micro H
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

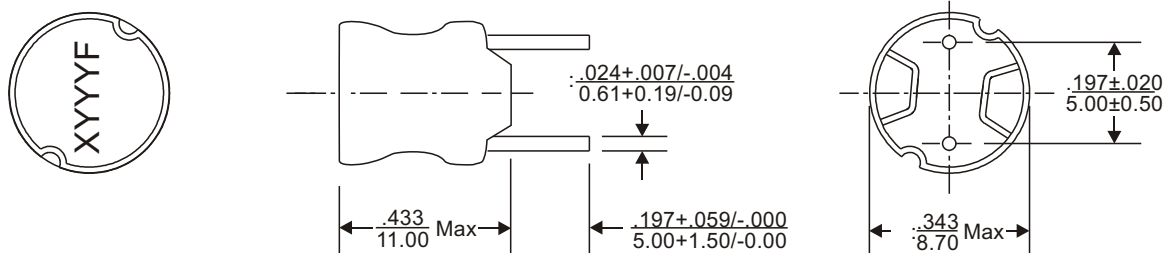
Part Number	Inductance L (uH)	Inductance Tolerance (%)	Test <sup>2</sup> Frequency of L, Q (MHz)	Q Min.	DCR ( ) Max	Rated DC Current, Isat (A) Max	Rated DC Current, Irms (A) Max	SRF (MHz) Typ.	Marking (XXXX)
UIT622EM-1R0F	1.0	20	1	20	0.013	10.0	3.71	150	M1R0
UIT622EM-1R5F	1.5	20	1	20	0.016	8.50	3.32	130	M1R5
UIT622EM-2R2F	2.2	20	1	20	0.021	6.50	3.15	100	M2R2
UIT622EM-3R3F	3.3	20	1	20	0.025	5.50	2.66	79	M3R3
UIT622EM-4R7F	4.7	20	1	20	0.030	4.30	2.27	51	M4R7
UIT622EM-6R8F	6.8	20	1	20	0.035	3.70	2.10	29	M6R8
UIT622EK-100F	10	10	1	50	0.045	3.00	1.96	14	K100
UIT622EK-120F	12	10	1	50	0.050	2.60	1.82	13	K120
UIT622EK-150F	15	10	1	50	0.056	2.30	1.75	12	K150
UIT622EK-180F	18	10	1	40	0.061	2.20	1.54	11	K180
UIT622EK-220F	22	10	1	40	0.070	2.00	1.29	9.2	K220
UIT622EK-270F	27	10	1	40	0.080	1.70	1.22	8.5	K270
UIT622EK-330F	33	10	1	30	0.090	1.60	1.17	7.8	K330
UIT622EK-390F	39	10	1	30	0.10	1.50	1.14	6.9	K390
UIT622EK-470F	47	10	1	30	0.16	1.40	0.79	6.5	K470
UIT622EK-560F	56	10	1	30	0.18	1.30	0.76	5.4	K560
UIT622EK-680F	68	10	1	30	0.21	1.20	0.70	4.9	K680
UIT622EK-820F	82	10	1	30	0.23	1.10	0.67	4.1	K820
UIT622EK-101F	100	10	0.796	20	0.28	0.91	0.58	3.7	K101
UIT622EK-121F	120	10	0.796	20	0.32	0.84	0.56	3.4	K121
UIT622EK-151F	150	10	0.796	20	0.37	0.75	0.42	3.2	K151
UIT622EK-181F	180	10	0.796	20	0.58	0.69	0.40	2.8	K181
UIT622EK-221F	220	10	0.796	20	0.65	0.64	0.38	2.7	K221
UIT622EK-271F	270	10	0.796	20	0.75	0.57	0.35	2.4	K271
UIT622EK-331F	330	10	0.796	20	0.85	0.54	0.33	2.3	K331
UIT622EK-391F	390	10	0.796	20	1.00	0.48	0.28	2.1	K391
UIT622EK-471F	470	10	0.796	20	1.10	0.46	0.25	1.9	K471
UIT622EK-561F	560	10	0.796	20	1.40	0.41	0.23	1.8	K561
UIT622EK-681F	680	10	0.796	20	1.60	0.38	0.21	1.6	K681
UIT622EK-821F	820	10	0.796	20	1.80	0.35	0.18	1.5	K821
UIT622EK-102F	1000	10	0.252	50	2.90	0.29	0.16	1.3	K102



**Notes:**

- Ordering Information: UIT622xa - bbbFc.  
 UIT622x = Product Type(x = "E" with heat shrink covering; or x = "F" without heat shrink covering).  
 a = Tolerance of Inductance (M =  $\pm 20\%$ ; K =  $\pm 10\%$ ).  
 bbb = Inductance value in uH (i.e. 3R3 = 3.3uH; 330 = 33uH; 331 = 330uH; 102 = 1000uH).  
 F = Internal Control Code.  
 c = Packaging Code (No code = Non Tape & Reel Packaging, i.e. Tray packaging).
- Test frequency is specified as the frequency for measuring the inductance and Q value.
- Operating temperature range:  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$ .
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

**MECHANICAL DIMENSIONS**

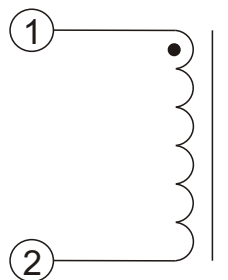


**Notes:**

- All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
- Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 2.0typ.
Tray packaging	: 136pcs/ tray

**SCHEMATICS**



**FOR MORE INFORMATION, PLEASE CONTACT**

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Hong Kong

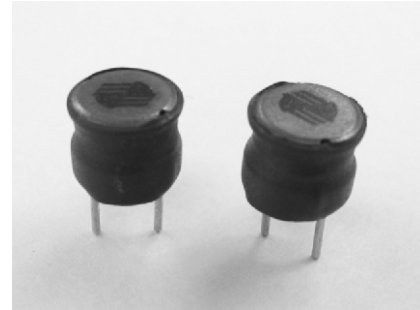
Tel: (852) 2954 3333 Fax: (852) 2954 3304

Email: eempl@eleceltek.com

Website: <http://www.eleceltek.com> / [www.eemagnetic.com](http://www.eemagnetic.com)

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-  Compact design
- Open magnetic circuit construction,
-  Low resistance and high rated current
-  Ideal for use as choke coil for high current DC circuits  
in all types of electronic instrument.
-  Inductance range from 3.9 to 1000 micro H
-  RoHS compliant

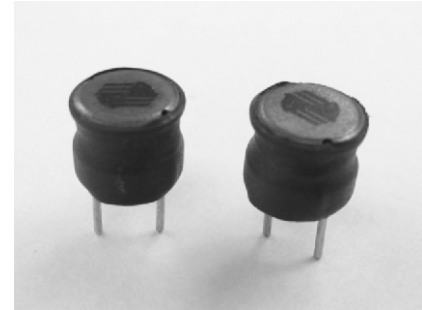


**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Inductance (uH)	Inductance Tolerance (%)	Test Frequency of	DCR (ohm)	Rated DC <sup>2</sup> Current	SRF (MHz)	Marking (XXXX)
		K	L (MHz)	Max	(A) max	Typ.	
UIT824ZK-100F	10	10	1	0.052	2.20	44	K100
UIT824ZK-120F	12	10	1	0.059	2.00	33	K120
UIT824ZK-150F	15	10	1	0.065	1.93	25	K150
UIT824ZK-180F	18	10	1	0.071	1.77	16	K180
UIT824ZK-220F	22	10	1	0.076	1.72	12	K220
UIT824ZK-270F	27	10	1	0.082	1.56	8.3	K270
UIT824ZK-330F	33	10	1	0.086	1.49	5.9	K330
UIT824ZK-390F	39	10	1	0.095	1.40	4.9	K390
UIT824ZK-470F	47	10	1	0.11	1.29	4.1	K470
UIT824ZK-560F	56	10	1	0.12	1.25	4.0	K560
UIT824ZK-680F	68	10	1	0.13	1.24	3.9	K680
UIT824ZK-820F	82	10	1	0.14	1.04	3.6	K820
UIT824ZK-101F	100	10	1	0.18	1.02	2.8	K101
UIT824ZK-121F	120	10	1	0.19	0.94	2.6	K121
UIT824ZK-151F	150	10	1	0.22	0.92	2.2	K151
UIT824ZK-181F	180	10	1	0.25	0.85	2.1	K181
UIT824ZK-221F	220	10	1	0.28	0.82	1.9	K221
UIT824ZK-271F	270	10	1	0.46	0.60	1.6	K271
UIT824ZK-331F	330	10	1	0.50	0.56	1.5	K331
UIT824ZK-391F	390	10	1	0.56	0.52	1.4	K391
UIT824ZK-471F	470	10	1	0.62	0.48	1.3	K471
UIT824ZK-561F	560	10	1	0.69	0.45	1.2	K561
UIT824ZK-681F	680	10	1	0.79	0.44	1.1	K681
UIT824ZK-821F	820	10	1	0.86	0.40	1.0	K821
UIT824ZK-102F	1000	10	1	1.60	0.31	0.87	K102



-  Compact design
- Open magnetic circuit construction,
-  Low resistance and high rated current
-  Ideal for use as choke coil for high current DC circuits  
in all types of electronic instrument.
-  Inductance range from 10 to 3900 micro H
-  RoHS compliant



ELECTRICAL SPECIFICATION @ 25°C

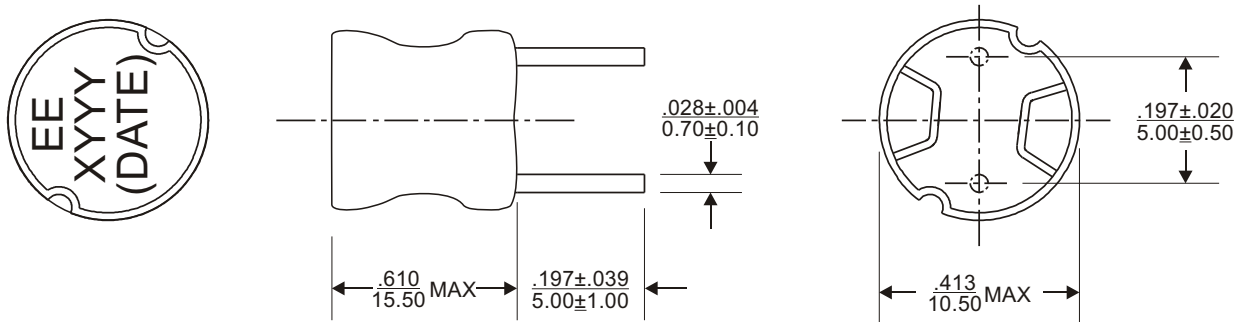
Part Number	Inductance (uH)	Inductance Tolerance (%)	Test Frequency of	DCR (ohm)	Rated DC <sup>2</sup> Current	SRF (MHz)	Marking (XXXX)
		K	L (MHz)	Max	(A) max	Typ.	
UIT824ZK-122F	1200	10	1	1.80	0.28	0.83	K122
UIT824ZK-152F	1500	10	1	2.10	0.27	0.77	K152
UIT824ZK-182F	1800	10	1	2.30	0.24	0.71	K182
UIT824ZK-222F	2200	10	1	2.60	0.24	0.66	K222
UIT824ZK-272F	2700	10	1	3.35	0.19	0.61	K272
UIT824ZK-332F	3300	10	1	4.00	0.18	0.52	K332
UIT824ZK-392F	3900	10	1	4.50	0.16	0.48	K392

**Notes:**

- Ordering Information: UIT824Za - bbbFc.  
UIT824Z = Product Type.  
a = Tolerance of Inductance (K =  $\pm 10\%$ ).  
bbb = Inductance value in uH (i.e. 470 = 47uH; 471 = 470uH; 272 = 2700uH; )  
F = Internal Control Code.  
c = Packaging Code (No code = Non Tape & Reel Packaging, i.e. Tray packaging).
- The rated DC current is that at which the inductance values decreases by 10% by the excitation with DC current.
- Operating temperature range: -40°C to +125°C.
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



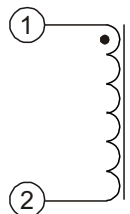
MECHANICAL DIMENSIONS



Notes:

5. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
6. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

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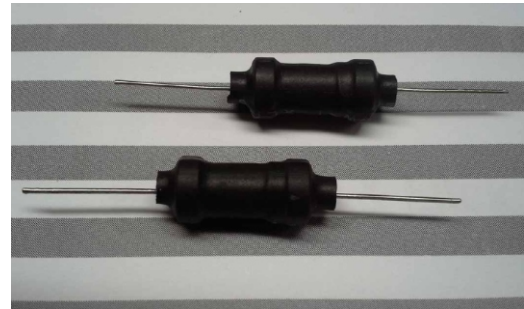
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-  Suitable for DC/DC conversions in notebook computers, or as a choke coil for noise filtering.
-  High performance and small size for printed circuit mounting
-  Compact design with high energy storage and low resistance
-  Inductance range from 3.9 to 1000 micro H
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

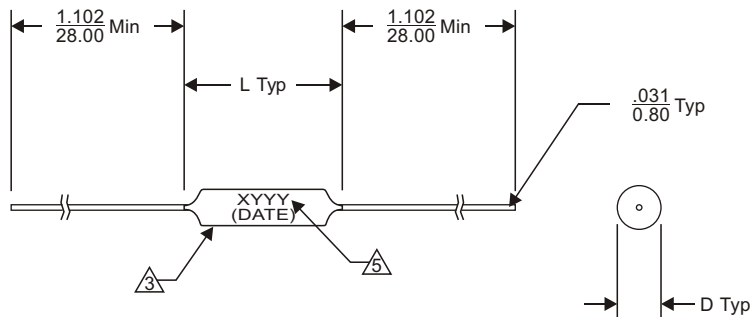
Part Number	Inductance (uH)	Inductance Tolerance (%)	Test <sup>2</sup> Frequency	DCR (m )	Idc <sup>3</sup> (A)	Self-resonant Frequency (MHz) Typ	Marking (YYYY)
		M	(kHz)	Typ	Max		
UIT1126M-3R9F	3.9	±20	100	10	12	95	M3R9
UIT1126M-5R6F	5.6	±20	100	17	8	83	M5R6
UIT1126M-100F	10	±20	100	35	5	65	M100
UIT1126M-150F	15	±20	10	50	4	55	M150
UIT1126M-330F	33	±20	10	70	3.5	7	M330
UIT1126M-680F	68	±20	10	100	3	5	M680
UIT1126M-101F	100	±20	10	150	2.5	3.5	M101
UIT1126M-151F	150	±20	10	300	1.8	2.5	M151
UIT1126M-331F	330	±20	10	500	1.4	2	M331
UIT1126M-681F	680	±20	10	1000	1	1.1	M681
UIT1126M-102F	1000	±20	10	1500	0.8	0.85	M102
UIT1126M-152F	1500	±20	10	2000	0.7	0.79	M152
UIT1126M-332F	3300	±20	10	4000	0.5	0.46	M332
UIT1126M-682F	6800	±20	10	8000	0.35	0.36	M682
UIT1126M-103F	10000	±20	10	12000	0.3	0.25	M103

**Notes:**

- Ordering Information: UIT1126a - bbbFc.
  - UIT1126 = Product Type.
  - a = Tolerance of Inductance ( M = ±20%).
  - bbb = Inductance value in uH (i.e. 3R9 = 3.9uH; 150 = 15uH; 151 = 150uH; 152 = 1500uH; 103 = 10000uH).
  - F = Internal Control Code.
  - c = Packaging Code (No code = Non Tape & Reel Packaging, i.e. Tray packaging).
- Test frequency is specified for testing the inductance.
- Inductance drops by 10% maximum from its initial value.
- Operating temperature range: -40°C to +125°C.
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



MECHANICAL DIMENSIONS

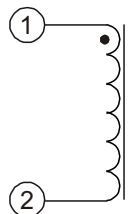


E&E Part Number UIT1126X-YYY	Dimensions	
	D	L
UIT1126M-3R9	$.354$ 9.00	$1.024$ 26.00
UIT1126M-5R6	$.315$ 8.00	$1.024$ 26.00
UIT1126M-100	$.295$ 7.50	$1.024$ 26.00
UIT1126M-150	$.287$ 7.30	$1.024$ 26.00
UIT1126M-330	$.433$ 11.00	$1.024$ 26.00
UIT1126M-680	$.433$ 11.00	$1.024$ 26.00
UIT1126M-101	$.394$ 10.00	$1.024$ 26.00
UIT1126M-151	$.386$ 9.80	$1.024$ 26.00
UIT1126M-331	$.433$ 11.00	$1.024$ 26.00
UIT1126M-681	$.394$ 10.00	$1.024$ 26.00
UIT1126M-102	$.386$ 9.80	$1.024$ 26.00
UIT1126M-152	$.406$ 10.30	$1.024$ 26.00
UIT1126M-332	$.417$ 10.60	$1.024$ 26.00
UIT1126M-682	$.425$ 10.80	$1.024$ 26.00
UIT1126M-103	$.386$ 9.80	$1.024$ 26.00

Notes:

- All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
- Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

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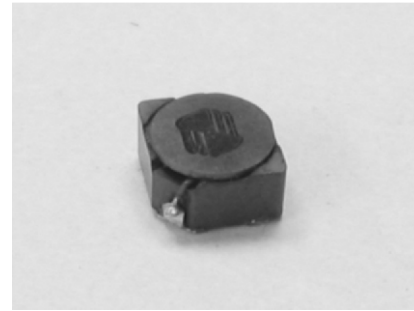
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-  Magnetically Shielded
-  Miniature in size and high energy storage
-  Ideal for high current requirements of notebook, video recorders and other DC-DC conversion applications
-  Custom inductance value or tolerance is available
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Inductance (uH)	Tolerance (%)	Test Frequency <sup>2</sup> (MHz)	DCR (m Max)	Rated DC Current <sup>3</sup> (A)	Marking (XXXX)
SIS4D18N-1R0R	1.0	±30	1	45	1.72	N1R0
SIS4D18N-2R2R	2.2	±30	1	75	1.32	N2R2
SIS4D18N-2R7R	2.7	±30	1	105	1.28	N2R7
SIS4D18N-3R3R	3.3	±30	1	110	1.04	N3R3
SIS4D18N-3R9R	3.9	±30	1	155	0.88	N3R9
SIS4D18N-4R7R	4.7	±30	1	162	0.84	N4R7
SIS4D18N-5R6R	5.6	±30	1	170	0.80	N5R6
SIS4D18N-6R8R	6.8	±30	1	200	0.76	N6R8
SIS4D18N-8R2R	8.2	±30	1	245	0.68	N8R2
SIS4D18N-100R	10	±30	0.1	200	0.61	N100
SIS4D18N-120R	12	±30	0.1	210	0.56	N120
SIS4D18N-150R	15	±30	0.1	240	0.50	N150
SIS4D18N-180R	18	±30	0.1	338	0.48	N180
SIS4D18N-220R	22	±30	0.1	397	0.41	N220
SIS4D18N-270R	27	±30	0.1	441	0.35	N270
SIS4D18N-330R	33	±30	0.1	694	0.32	N330
SIS4D18N-390R	39	±30	0.1	709	0.30	N390
SIS4D18N-470R	47	±30	0.1	922	0.28	N470
SIS4D18N-560R	56	±30	0.1	1080	0.26	N560
SIS4D18N-680R	68	±30	0.1	1300	0.24	N680
SIS4D18N-820R	82	±30	0.1	1560	0.22	N820
SIS4D18N-101R	100	±30	0.1	1730	0.20	N101
SIS4D18N-121R	120	±30	0.1	2390	0.18	N121
SIS4D18N-151R	150	±30	0.1	2670	0.15	N151
SIS4D18N-181R	180	±30	0.1	4000	0.14	N181

**Notes:**

1. Ordering Information: SIS4D18a - bbbRc.

SIS4D18 = Product Type.

a = Tolerance of Inductance (N = ±30%).

bbb = Inductance value in uH (i.e. 4R7 = 4.7uH; 470 = 47uH; 151 = 150uH).

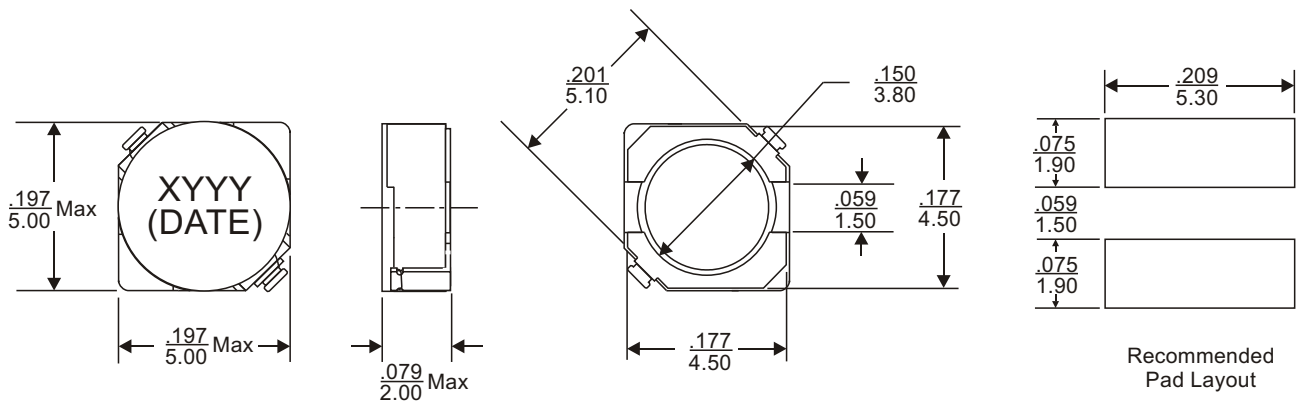
R = Internal Control Code.

c = Packaging Code (U = Tape & Reel Packaging in 7 inch Reel).

2. Test frequency is specified as the frequency for measuring the inductance.



**MECHANICAL DIMENSIONS**

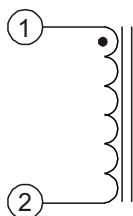


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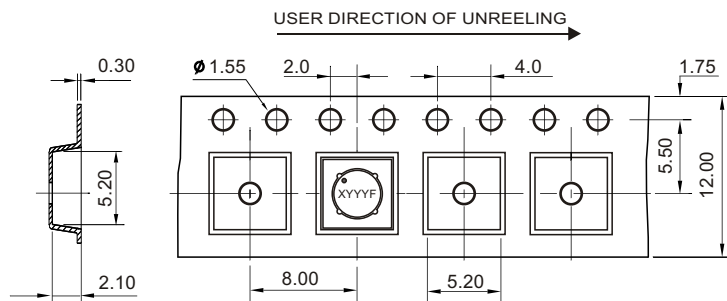
- Rated D.C. current indicates the value of the current when the inductance is 35% lower than its initial value or the current when temperature rising  $T=40^{\circ}\text{C}$  at D.C. Superposition.
- Operating temperature range:  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$ .
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
- All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
- Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 1.0 typ.
Tape & Reel	: 1000 / reel

**SCHEMATIC**



**PACKAGING**



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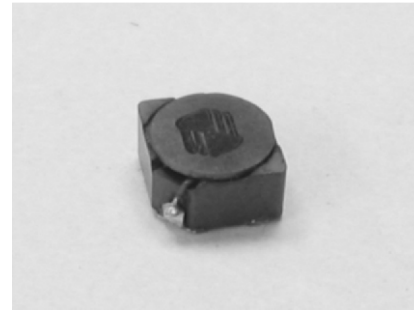
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-  Magnetically Shielded
-  Miniature in size and high energy storage
-  Ideal for high current requirements of notebook, video recorders and other DC-DC conversion applications
-  Custom inductance value or tolerance is available
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Inductance (uH)	Tolerance (%)	Test Frequency <sup>2</sup> (kHz)	DCR (Max)	Rated DC Current <sup>3</sup> (A)	Marking (XXXX)
SIS4D28N-1R2R	1.2	±30	100	23.6m	2.56	N1R2
SIS4D28N-1R8R	1.8	±30	100	27.5m	2.20	N1R8
SIS4D28N-2R2R	2.2	±30	100	31.3m	2.04	N2R2
SIS4D28N-2R7R	2.7	±30	100	43.3m	1.60	N2R7
SIS4D28N-3R3R	3.3	±30	100	49.2m	1.57	N3R3
SIS4D28N-3R9R	3.9	±30	100	64.8m	1.44	N3R9
SIS4D28N-4R7R	4.7	±30	100	72.0m	1.32	N4R7
SIS4D28N-5R6R	5.6	±30	100	100.9m	1.17	N5R6
SIS4D28N-6R8R	6.8	±30	100	108.9m	1.12	N6R8
SIS4D28N-8R2R	8.2	±30	100	117.5m	1.04	N8R2
SIS4D28N-100R	10	±30	100	128.3m	1.00	N100
SIS4D28N-120R	12	±30	100	131.6m	0.84	N120
SIS4D28N-150R	15	±30	100	149.0m	0.76	N150
SIS4D28N-180R	18	±30	100	166.0m	0.72	N180
SIS4D28N-220R	22	±30	100	235.0m	0.70	N220
SIS4D28N-270R	27	±30	100	261.0m	0.58	N270
SIS4D28N-330R	33	±30	100	331.3m	0.56	N330
SIS4D28N-390R	39	±30	100	383.7m	0.50	N390
SIS4D28N-470R	47	±30	100	587.0m	0.48	N470
SIS4D28N-560R	56	±30	100	624.5m	0.41	N560
SIS4D28N-680R	68	±30	100	699.0m	0.35	N680
SIS4D28N-820R	82	±30	100	914.8m	0.32	N820
SIS4D28N-101R	100	±30	100	1.02	0.29	N101
SIS4D28N-121R	120	±30	100	1.27	0.27	N121
SIS4D28N-151R	150	±30	100	1.35	0.24	N151
SIS4D28N-181R	180	±30	100	1.54	0.22	N181

**Notes:**

1. Ordering Information: SIS4D28a - bbbRc.

SIS4D28 = Product Type.

a = Tolerance of Inductance (N = ±30%).

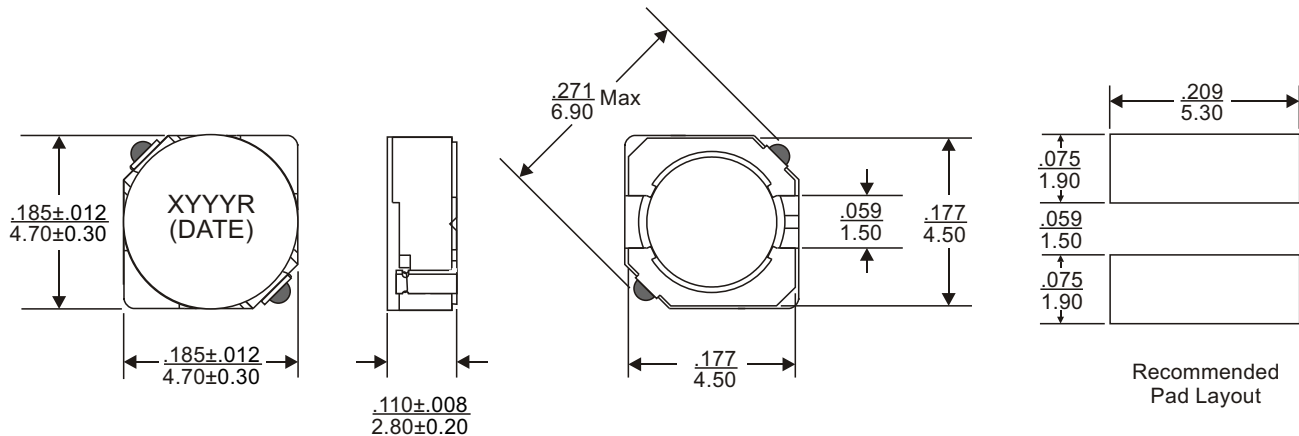
bbb = Inductance value in uH (i.e. 1R8 = 1.8uH; 180 = 18uH; 181 = 180uH).

R = Internal Control Code.

c = Packaging Code (U = Tape & Reel Packaging in 7 inch).



MECHANICAL DIMENSIONS

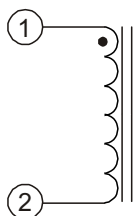


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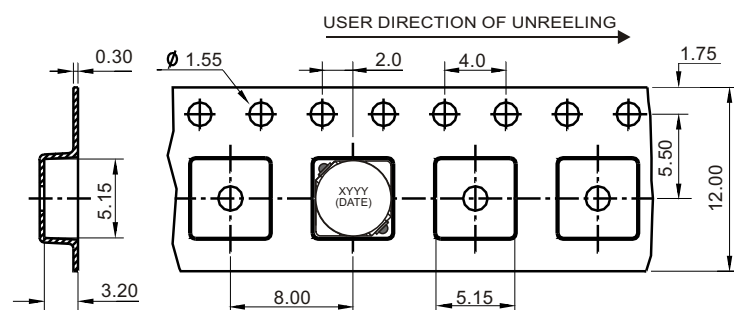
- Test frequency is specified as the frequency for measuring the inductance.
- Rated D.C. current indicates the value of the current when the inductance is 35% lower than its initial value or the current when temperature rising  $T=40^{\circ}\text{C}$  at D.C. Superposition.
- Operating temperature range:  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$ .
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
- All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
- Unless otherwise specified, all tolerances are  $\pm \frac{0.010}{0.25}$ .

Weight (in gram)	: 1.0 typ.
Tape & Reel	: 600 / reel

SCHEMATIC



PACKAGING



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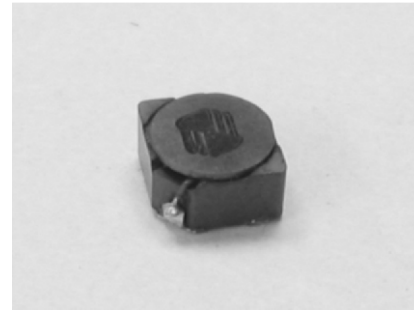
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Website: <http://www.eleceltek.com> / [www.eemagnetic.com](http://www.eemagnetic.com)

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-  Custom inductance value or tolerance is available
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

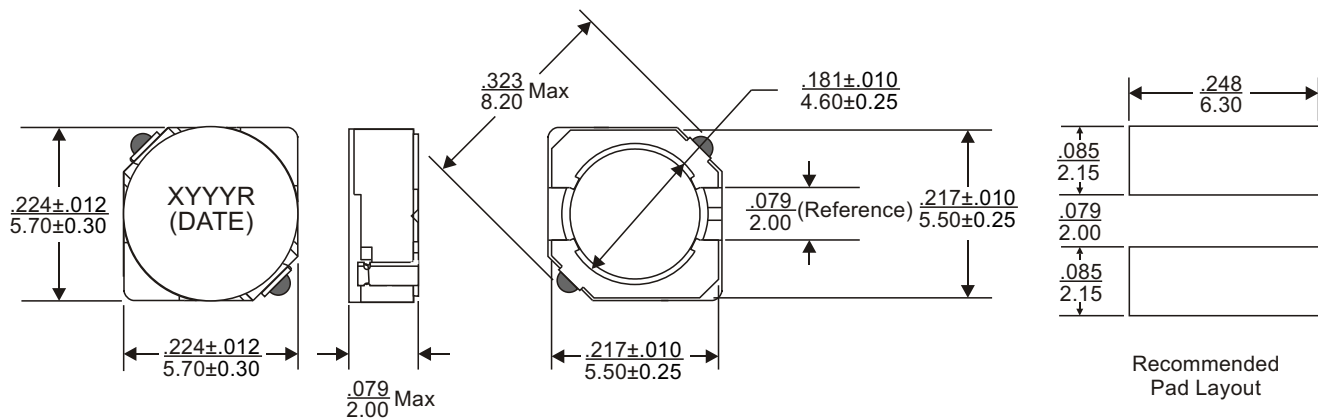
Part Number	Inductance (uH)	Tolerance (%)	Test Frequency <sup>2</sup> (kHz)	DCR (m Max)	Rated DC Current <sup>3</sup> (A)	Marking (YYYY)
SIS5D18N-4R1R	4.1	±30	10	57	1.95	N4R1
SIS5D18N-5R4R	5.4	±30	10	76	1.60	N5R4
SIS5D18N-6R2R	6.2	±30	10	96	1.40	N6R2
SIS5D18N-8R9R	8.9	±30	10	116	1.25	N8R9
SIS5D18N-100R	10	±30	10	124	1.20	N100
SIS5D18N-120R	12	±30	10	153	1.10	N120
SIS5D18N-150R	15	±30	10	196	0.97	N150
SIS5D18N-180R	18	±30	10	210	0.85	N180
SIS5D18N-220R	22	±30	10	290	0.80	N220
SIS5D18N-270R	27	±30	10	330	0.75	N270
SIS5D18N-330R	33	±30	10	386	0.65	N330
SIS5D18N-390R	39	±30	10	520	0.57	N390
SIS5D18N-470R	47	±30	10	595	0.54	N470
SIS5D18N-560R	56	±30	10	665	0.50	N560
SIS5D18N-680R	68	±30	10	840	0.43	N680
SIS5D18N-820R	82	±30	10	978	0.41	N820
SIS5D18N-101R	100	±30	10	1200	0.36	N101

**Notes:**

- Ordering Information: SIS5D18a - bbbRc.  
SIS5D18 = Product Type.  
a = Tolerance of Inductance (N = ±30%).  
bbb = Inductance value in uH (i.e. 4R1 = 4.1uH; 470 = 47uH; 101 = 100uH).  
R = Internal Control Code.  
c = Packaging Code (U = Tape & Reel Packaging in 7 inch Reel ).
- Test frequency is specified as the frequency for measuring the inductance.
- Rated D.C. current indicates the value of the current when the inductance is 35% lower than its initial value or the current when temperature rising T=40°C at D.C. Superposition.
- Operating temperature range: -40°C to +125°C.
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



MECHANICAL DIMENSIONS

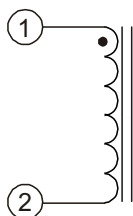


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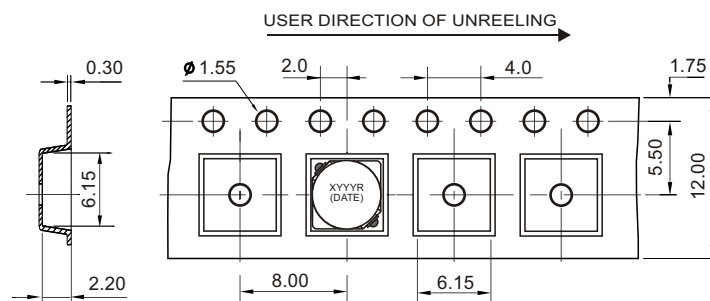
6. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
7. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 1.0 typ.
Tape & Reel	: 950 / reel

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FOR MORE INFORMATION, PLEASE CONTACT

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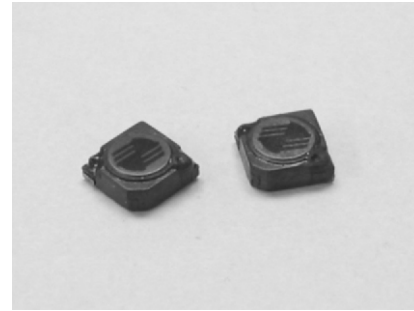
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**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Inductance (uH)	Tolerance (%)			Test Frequency <sup>2</sup> (kHz)	DCR (Max)	Rated DC Current <sup>3</sup> (A)	Marking (YYYY)
		K	L	M				
SIS5D23M-2R2F	2.2	N/A	N/A	± 20	100	39m	2.16	M2R2
SIS5D23M-2R7F	2.7	N/A	N/A	± 20	100	44m	2.08	M2R7
SIS5D23M-3R3F	3.3	N/A	N/A	± 20	100	49m	1.90	M3R3
SIS5D23M-3R9F	3.9	N/A	N/A	±20	100	56m	1.84	M3R9
SIS5D23M-4R7F	4.7	N/A	N/A	± 20	100	62m	1.60	M4R7
SIS5D23M-5R6F	5.6	N/A	N/A	± 20	100	78m	1.44	M5R6
SIS5D23M-6R8F	6.8	N/A	N/A	± 20	100	91m	1.36	M6R8
SIS5D23M-8R2F	8.2	N/A	N/A	± 20	100	103m	1.12	M8R2
SIS5D23L-100F	10.0	N/A	± 15	N/A	100	133m	1.04	L100
SIS5D23L-120F	12.0	N/A	± 15	N/A	100	148m	0.96	L120
SIS5D23K-150F	15.0	± 10	N/A	N/A	100	166m	0.88	K150
SIS5D23K-180F	18.0	± 10	N/A	N/A	100	213m	0.77	K180
SIS5D23K-220F	22.0	± 10	N/A	N/A	100	248m	0.73	K220
SIS5D23K-270F	27.0	± 10	N/A	N/A	100	328m	0.64	K270
SIS5D23K-330F	33.0	± 10	N/A	N/A	100	378m	0.58	K330
SIS5D23K-390F	39.0	± 10	N/A	N/A	100	438m	0.54	K390
SIS5D23K-470F	47.0	± 10	N/A	N/A	100	546m	0.49	K470
SIS5D23K-560F	56.0	± 10	N/A	N/A	100	621m	0.45	K560
SIS5D23K-680F	68.0	± 10	N/A	N/A	100	715m	0.41	K680
SIS5D23K-820F	82.0	± 10	N/A	N/A	100	1.00	0.35	K820
SIS5D23K-101F	100	± 10	N/A	N/A	100	1.07	0.33	K101
SIS5D23K-121F	120	± 10	N/A	N/A	100	1.25	0.32	K121
SIS5D23K-151F	150	± 10	N/A	N/A	100	1.66	0.26	K151
SIS5D23K-181F	180	± 10	N/A	N/A	100	1.90	0.23	K181
SIS5D23K-221F	220	± 10	N/A	N/A	100	2.44	0.21	K221
SIS5D23K-271F	270	± 10	N/A	N/A	100	2.73	0.19	K271

**Notes:**

1. Ordering Information: SIS5D23a - bbbFc.

SIS5D23 = Product Type.

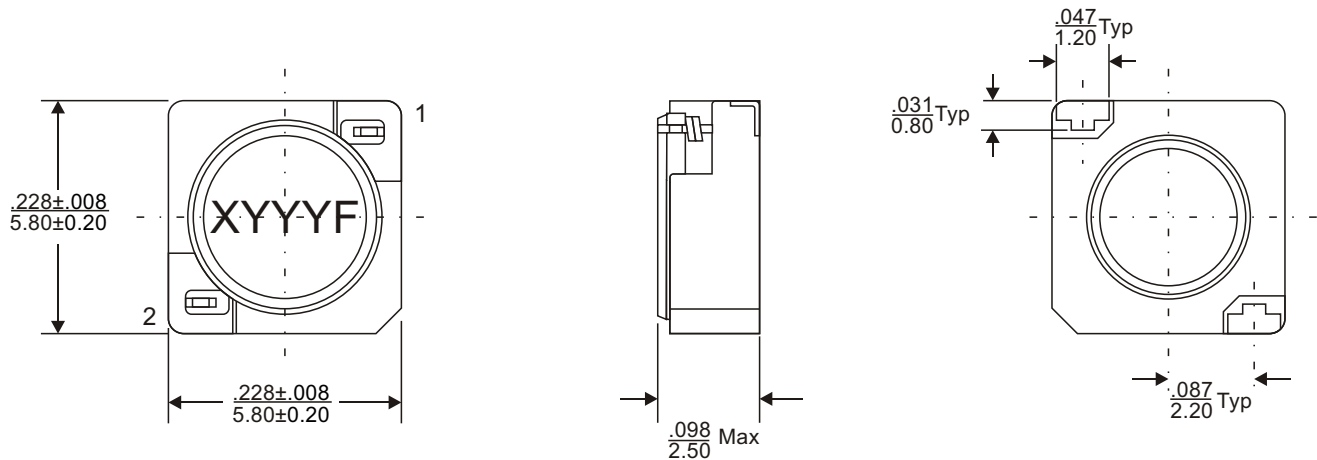
a = Tolerance of Inductance (K= ±10%; L= ±15%; M = ±20%).

bbb = Inductance value in uH (i.e. 2R7 = 2.7uH; 270 = 270uH; 271 = 270uH).

F = Internal Control Code.

c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).

## MECHANICAL DIMENSIONS



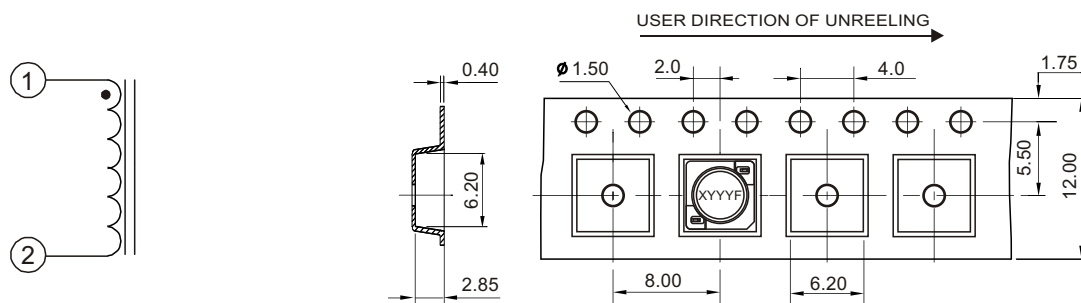
Notes:

2. Test frequency is specified as the frequency for measuring the inductance.
3. Rated D.C. current indicates the value of the current when the inductance is 10% lower than its initial value or the current when temperature rising  $T=40^{\circ}\text{C}$  at D.C. superposition.
4. Operating temperature range:  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$ .
5. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
6. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
7. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{.025}$ .

Weight (in gram)	:	0.5 typ.
Tape & Reel	:	2800 / reel

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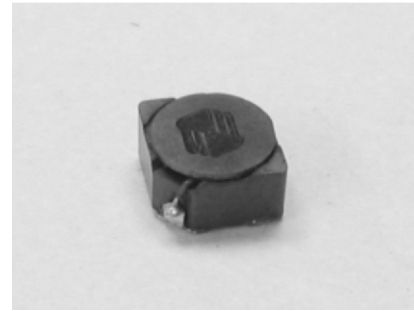
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-  Custom inductance value or tolerance is available
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Inductance (uH)	Tolerance (%)	Test Frequency <sup>2</sup> (kHz)	DCR (m Max)	Rated DC Current <sup>3</sup> (A)	Marking (XYYY)
SIS5D28N-2R5R	2.5	±30	10	18	2.6	N2R5
SIS5D28N-3R0R	3.0	±30	10	24	2.4	N3R0
SIS5D28N-4R2R	4.2	±30	10	31	2.2	N4R2
SIS5D28N-5R3R	5.3	±30	10	38	1.9	N5R3
SIS5D28N-6R2R	6.2	±30	10	45	1.8	N6R2
SIS5D28N-8R2R	8.2	±30	10	53	1.6	N8R2
SIS5D28N-100R	10	±30	10	65	1.3	N100
SIS5D28N-120R	12	±30	10	76	1.2	N120
SIS5D28N-150R	15	±30	10	103	1.1	N150
SIS5D28N-180R	18	±30	10	110	1.0	N180
SIS5D28N-220R	22	±30	10	122	0.9	N220
SIS5D28N-270R	27	±30	10	175	0.85	N270
SIS5D28N-330R	33	±30	10	189	0.75	N330
SIS5D28N-390R	39	±30	10	212	0.70	N390
SIS5D28N-470R	47	±30	10	250	0.62	N470
SIS5D28N-560R	56	±30	10	305	0.58	N560
SIS5D28N-680R	68	±30	10	355	0.52	N680
SIS5D28N-820R	82	±30	10	463	0.46	N820
SIS5D28N-101R	100	±30	10	520	0.42	N101

**Notes:**

1. Ordering Information: SIS5D28a - bbbRc.

SIS5D28 = Product Type.

a = Tolerance of Inductance (N= ±30%).

bbb = Inductance value in uH (i.e. 4R2 = 4.2uH; 470 = 47uH; 101 = 100uH).

R = Internal Control Code.

c = Packaging Code (U = Tape & Reel Packaging in 7 inch Reel).

2. Test frequency is specified as the frequency for measuring the inductance.

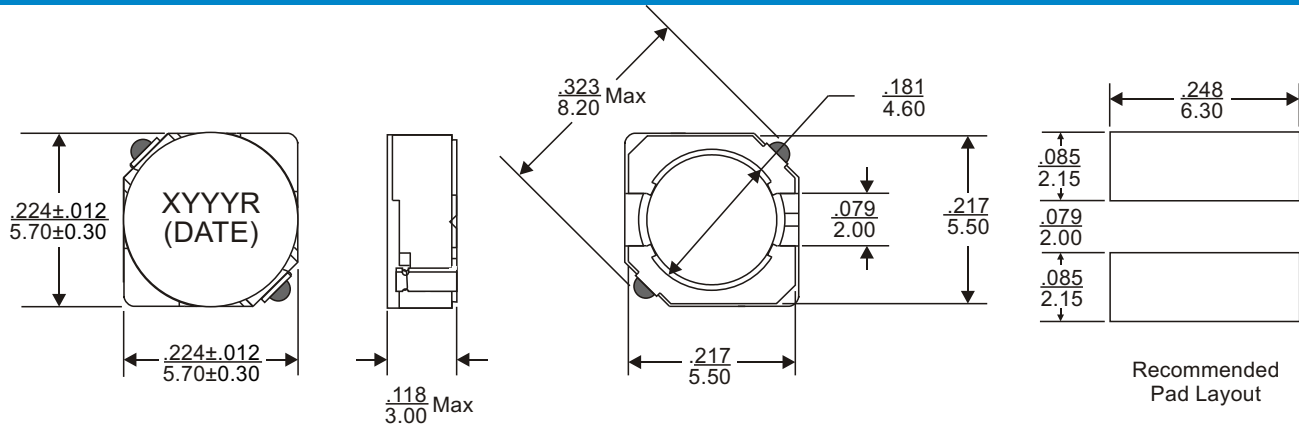
3. Rated D.C. current indicates the value of the current when the inductance is 35% lower than its initial value or the current when temperature rising T=30°C at D.C. superposition.

4. Operating temperature range: -40°C to +125°C.

5. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB



MECHANICAL DIMENSIONS



Notes:

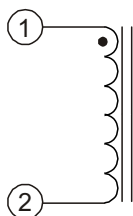
trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

6. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.

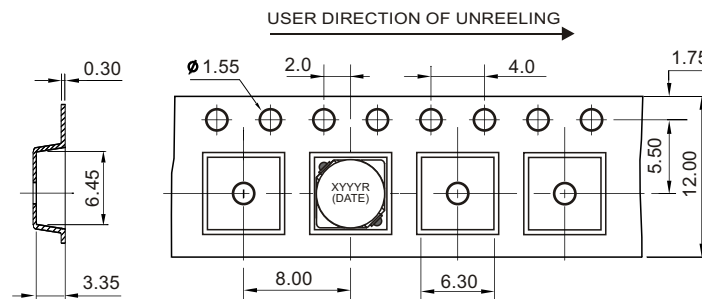
7. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$

Weight (in gram)	: 1.0 typ.
Tape & Reel	: 550 / reel

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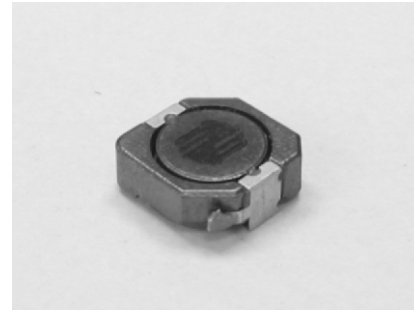
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**ELECTRICAL SPECIFICATION @ 25°C**

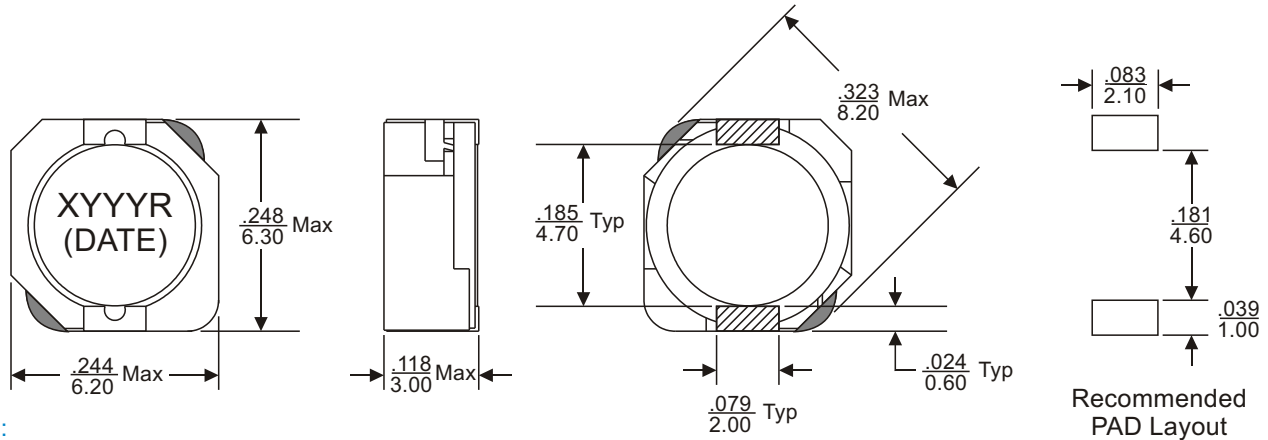
Part Number	Inductance (uH)	Inductance Tolerance	Test Frequency <sup>2</sup> (Hz)	DCR (m Max)	Rated DC Current <sup>3</sup> (A)	Marking (YYYY)
SIS5D28RN-2R5R	2.5	±30	100k	17.6	2.60	N2R5
SIS5D28RN-3R3R	3.3	±30	100k	20.3	2.30	N3R3
SIS5D28RN-4R0R	4.0	±30	100k	27.0	2.10	N4R0
SIS5D28RN-5R0R	5.0	±30	100k	31.1	1.85	N5R0
SIS5D28RN-6R0R	6.0	±30	100k	41.9	1.70	N6R0
SIS5D28RN-8R0R	8.0	±30	100k	49.9	1.50	N8R0
SIS5D28RN-100R	10	±30	100k	54.0	1.30	N100
SIS5D28RN-120R	12	±30	100k	71.6	1.20	N120
SIS5D28RN-150R	15	±30	100k	82.4	1.10	N150
SIS5D28RN-180R	18	±30	100k	101.5	1.05	N180
SIS5D28RN-220R	22	±30	100k	119.0	0.95	N220
SIS5D28RN-270R	27	±30	100k	146.0	0.85	N270
SIS5D28RN-330R	33	±30	100k	182.5	0.76	N330
SIS5D28RN-390R	39	±30	100k	209.5	0.68	N390
SIS5D28RN-470R	47	±30	100k	229.5	0.60	N470
SIS5D28RN-560R	56	±30	100k	305.0	0.55	N560
SIS5D28RN-680R	68	±30	100k	351.0	0.48	N680
SIS5D28RN-820R	82	±30	100k	418.5	0.45	N820
SIS5D28RN-101R	100	±30	100k	520.0	0.40	N101

**Notes:**

- Ordering Information: SIS5D28Ra - bbbRc.  
SIS5D28R = Product Type.  
a = Tolerance of Inductance (N= ±30%).  
bbb = Inductance value in uH (i.e. 3R3 = 3.3uH; 330 = 33uH; 101 = 100uH).  
R = Internal Control Code.  
c = Packaging Code (U = Tape & Reel Packaging in 7 inch Reel).
- Test frequency is specified as the frequency for measuring the inductance.
- Rated D.C. current indicates the value of the current when the inductance is 35% lower than its initial value or the current when temperature rising T=40°C at D.C. superposition.
- Operating temperature range: -40°C to +125°C.
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB



**MECHANICAL DIMENSIONS**



**Notes:**

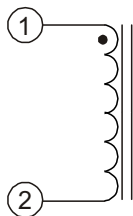
trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

6. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.

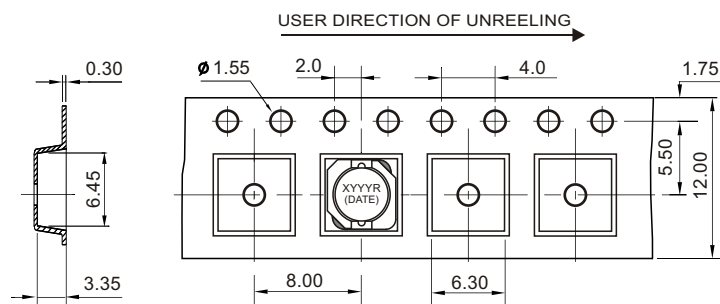
7. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$

Weight (in gram)	: 3.0 typ.
Tape & Reel	: 550 / reel

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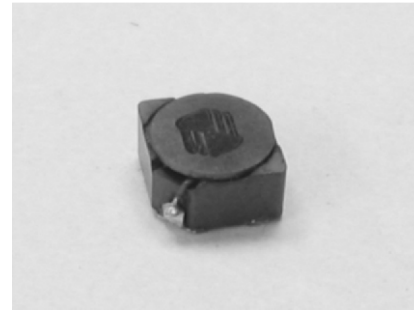
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**ELECTRICAL SPECIFICATION @ 25°C**

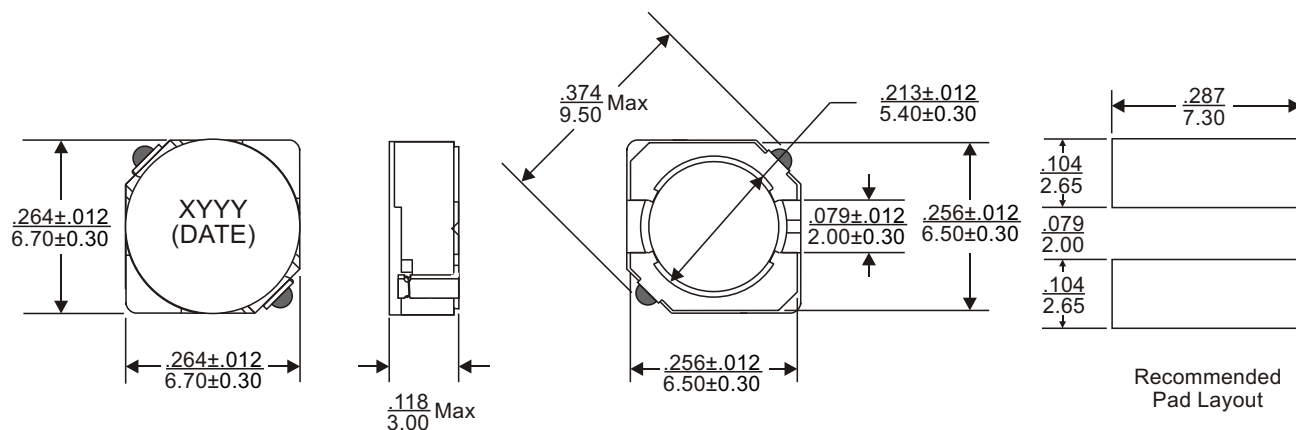
Part Number	Inductance (uH)	Tolerance (%)	Test Frequency <sup>2</sup> (kHz)	DCR (m Max)	Rated DC Current <sup>3</sup> (A)	Marking (YYYY)
SIS6D28N-3R0R	3.0	±30	10	24	3.00	N3R0
SIS6D28N-3R9R	3.9	±30	10	27	2.60	N3R9
SIS6D28N-5R0R	5.0	±30	10	31	2.40	N5R0
SIS6D28N-6R0R	6.0	±30	10	35	2.25	N6R0
SIS6D28N-7R3R	7.3	±30	10	54	2.10	N7R3
SIS6D28N-8R6R	8.6	±30	10	58	1.85	N8R6
SIS6D28N-100R	10	±30	10	65	1.70	N100
SIS6D28N-120R	12	±30	10	70	1.55	N120
SIS6D28N-150R	15	±30	10	84	1.40	N150
SIS6D28N-180R	18	±30	10	95	1.32	N180
SIS6D28N-220R	22	±30	10	128	1.20	N220
SIS6D28N-270R	27	±30	10	142	1.05	N270
SIS6D28N-330R	33	±30	10	165	0.97	N330
SIS6D28N-390R	39	±30	10	210	0.86	N390
SIS6D28N-470R	47	±30	10	238	0.80	N470
SIS6D28N-560R	56	±30	10	277	0.73	N560
SIS6D28N-680R	68	±30	10	304	0.65	N680
SIS6D28N-820R	82	±30	10	390	0.60	N820
SIS6D28N-101R	100	±30	10	535	0.54	N101

**Notes:**

- Ordering Information: SIS6D28a - bbbRc.  
 SIS6D28 = Product Type.  
 a = Tolerance of Inductance (N= ±30%).  
 bbb = Inductance value in uH (i.e. 3R9 = 3.9uH; 390 = 39uH; 101 = 100uH).  
 R = Internal Control Code.  
 c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).
- Test frequency is specified as the frequency for measuring the inductance.
- Rated D.C. current indicates the value of the current when the inductance is 35% lower than its initial value or the current when temperature rising T=30°C at D.C. superposition.
- Operating temperature range: -40°C to +125°C.
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the Operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



MECHANICAL DIMENSIONS

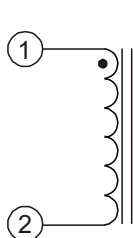


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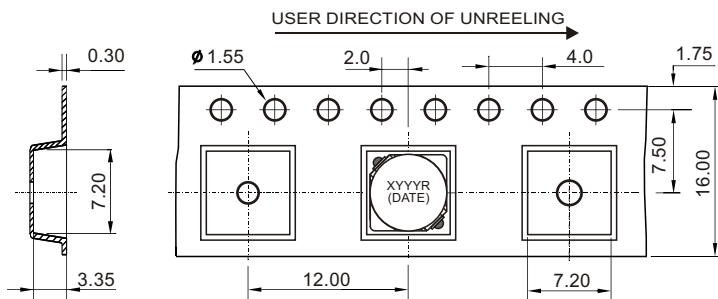
6. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
7. Unless otherwise specified, all tolerances are  $\pm \frac{0.010}{0.25}$ .

Weight (in gram)	: 1.0 typ.
Tape & Reel	: 1500 / reel

SCHEMATIC



PACKAGING



FOR MORE INFORMATION, PLEASE CONTACT

HEADQUARTER

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Phase II, Hong Kong Science Park, Shatin, N.T.  
Hong Kong

Tel: (852) 2954 3333 Fax: (852) 2954 3304






Email: eempl@eleceltek.com

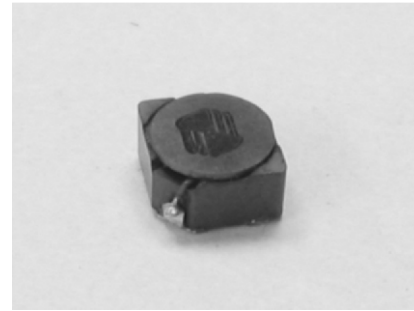
Website: <http://www.eleceltek.com> / [www.eemagnetic.com](http://www.eemagnetic.com)

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-  Magnetically Shielded
-  Miniature in size and high energy storage
-  Ideal for high current requirements of notebook, video recorders and other DC-DC conversion applications
-  Custom inductance value or tolerance is available
-  RoHS compliant



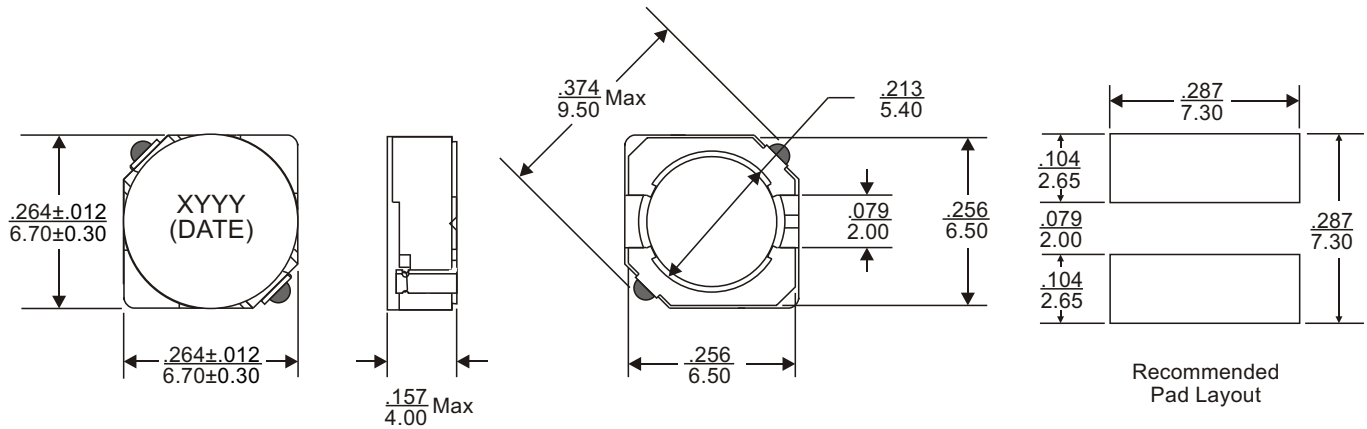
**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Inductance (uH)	Tolerance (%)	Test Frequency <sup>2</sup> (kHz)	DCR (m Max)	Rated DC Current <sup>3</sup> (A)	Marking (YYYY)
SIS6D38N-3R3R	3.3	±30	10	20	3.5	N3R3
SIS6D38N-5R0R	5.0	±30	10	24	2.9	N5R0
SIS6D38N-6R2R	6.2	±30	10	27	2.5	N6R2
SIS6D38N-7R4R	7.4	±30	10	31	2.3	N7R4
SIS6D38N-8R7R	8.7	±30	10	34	2.2	N8R7
SIS6D38N-100R	10	±30	10	38	2.0	N100
SIS6D38N-120R	12	±30	10	53	1.7	N120
SIS6D38N-150R	15	±30	10	57	1.6	N150
SIS6D38N-180R	18	±30	10	92	1.5	N180
SIS6D38N-220R	22	±30	10	96	1.3	N220
SIS6D38N-270R	27	±30	10	109	1.2	N270
SIS6D38N-330R	33	±30	10	124	1.1	N330
SIS6D38N-390R	39	±30	10	138	1.0	N390
SIS6D38N-470R	47	±30	10	155	0.95	N470
SIS6D38N-560R	56	±30	10	202	0.85	N560
SIS6D38N-680R	68	±30	10	234	0.75	N680
SIS6D38N-820R	82	±30	10	324	0.70	N820
SIS6D38N-101R	100	±30	10	358	0.65	N101

**Notes:**

- Ordering Information: SIS6D38a - bbbRc.  
 SIS6D38 = Product Type.  
 a = Tolerance of Inductance (N= ±30%).  
 bbb = Inductance value in uH (i.e. 3R3 = 3.3uH; 330 = 33uH; 101 = 100uH).  
 R = Internal Control Code.  
 c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).
- Test frequency is specified as the frequency for measuring the inductance.
- Rated D.C. current indicates the value of the current when the inductance is 35% lower than its initial value or the current when temperature rising T=30°C at D.C. Superposition.
- Operating temperature range: -40C to +125°C.
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

## MECHANICAL DIMENSIONS



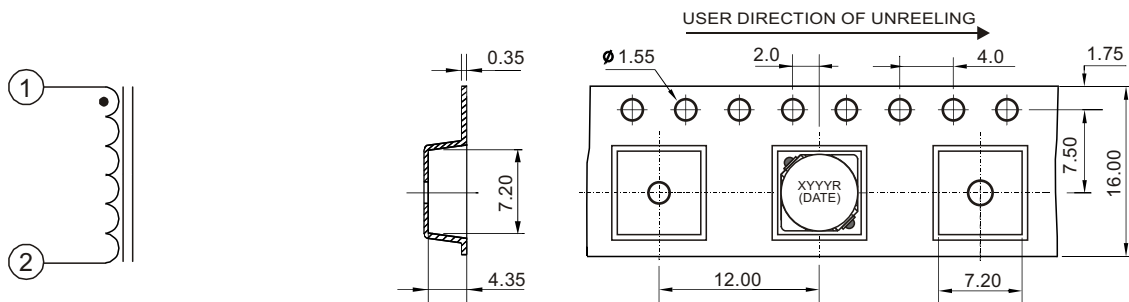
Notes:

6. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
7. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram) : 1.2 typ.  
Tape & Reel : 1100 / reel

## SCHEMATIC

## PACKAGING



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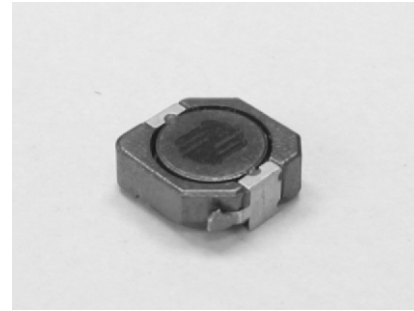
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**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Inductance (uH)	Inductance Tolerance	Test Frequency <sup>2</sup> (Hz)	DCR (m Max)	Rated DC Current <sup>3</sup> (A)	Marking (YYYY)
SIS104RN-1R0R	1.0	±30%	100k	6.0	12	N1R0
SIS104RN-1R5R	1.5	±30%	100k	8.1	10	N1R5
SIS104RN-2R5R	2.5	±30%	100k	10	7.5	N2R5
SIS104RN-3R3R	3.3	±30%	100k	12.7	6.7	N3R3
SIS104RN-3R8R	3.8	±30%	100k	13	6.0	N3R8
SIS104RN-4R7R	4.7	±30%	100k	20.5	5.7	N4R7
SIS104RN-5R2R	5.2	±30%	100k	22	5.5	N5R2
SIS104RN-7R0R	7.0	±30%	100k	27	4.8	N7R0
SIS104RN-100R	10	±30%	100k	35	4.4	N100
SIS104RN-150R	15	±30%	100k	50	3.6	N150
SIS104RN-220R	22	±30%	100k	73	2.9	N220
SIS104RN-330R	33	±30%	100k	93	2.3	N330
SIS104RN-470R	47	±30%	100k	128	2.1	N470
SIS104RN-680R	68	±30%	100k	213	1.5	N680
SIS104RN-101R	100	±30%	100k	304	1.35	N101
SIS104RN-151R	150	±30%	100k	506	1.15	N151
SIS104RN-221R	220	±30%	100k	756	0.92	N221
SIS104RN-331R	330	±30%	100k	1090	0.70	N331
SIS104RN-471R	470	±30%	100k	1243	0.60	N471

**Notes:**

1. Ordering Information: SIS104Ra - bbbRc.

SIS104R = Product Type.

a = Tolerance of Inductance (N= ±30%).

bbb = Inductance value in uH (i.e. 1R5 = 1.5uH; 150 = 15uH; 151 = 150uH).

R = Internal Control Code.

c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).

2. Test frequency is specified as the frequency for measuring the inductance.

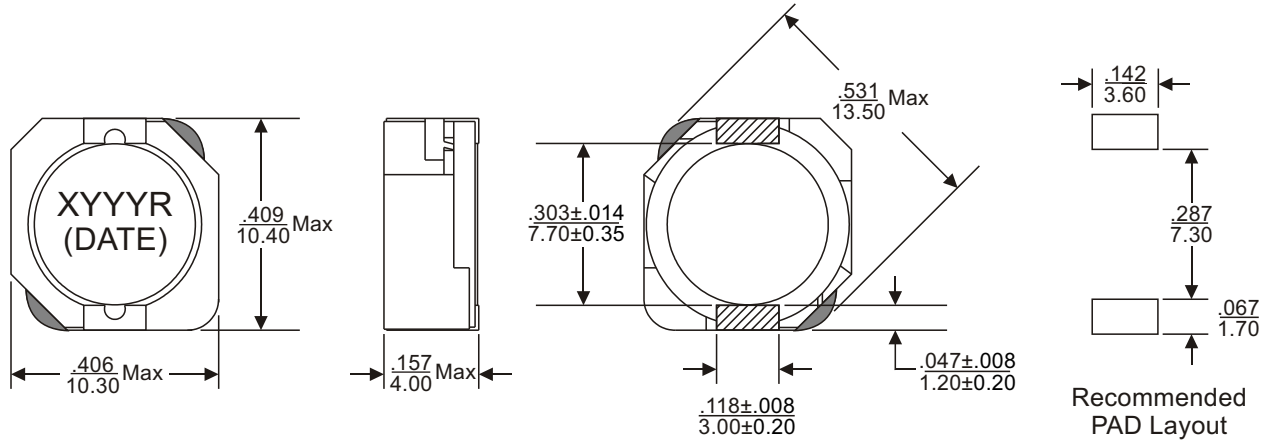
3. Rated D.C. current indicates the value of the current when the inductance is 35% lower than its initial value or the current when the temperature rising T=30°C at D.C. Superposition.

4. Operating temperature range: -40°C to +125°C.

5. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



MECHANICAL DIMENSIONS

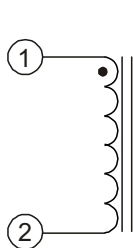


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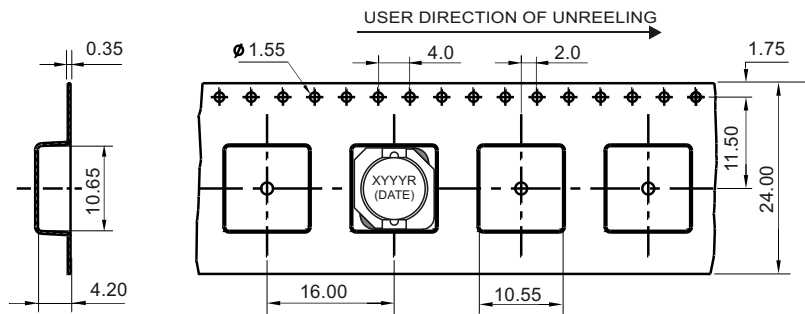
- All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
- Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 2.5 typ.
Tape & Reel	: 900 / reel

SCHEMATIC



PACKAGING



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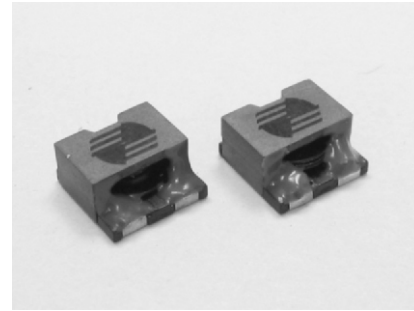
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**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Inductance <sup>2</sup> (uH)	Inductance Tolerance (%)	DCR (m Max)	Saturation Current <sup>3</sup> (A)		Heating Current <sup>4</sup> (A)	Marking (ZXYYY)
				at 25°C	at 100°C		
SIS105LN-R36R	0.36	±30	1.7	24.0	20.0	19.0	LNR36
SIS105LM-R80R	0.80	±20	2.4	16.0	13.2	17.7	LMR80
SIS105LM-1R4R	1.4	±20	4.1	12.0	10.0	13.0	LM1R4
SIS105LM-2R2R	2.2	±20	5.3	9.6	8.0	11.2	LM2R2
SIS105LM-3R2R	3.2	±20	7.5	7.8	6.6	9.0	LM3R2
SIS105LM-4R3R	4.3	±20	10.5	6.8	5.7	7.8	LM4R3
SIS105LM-5R7R	5.7	±20	12.4	5.8	4.9	7.4	LM5R7
SIS105LM-7R2R	7.2	±20	18.0	5.3	4.2	6.2	LM7R2
SIS105LM-8R8R	8.8	±20	23.8	4.8	4.0	4.9	LM8R8
SIS105SN-R22R	0.22	±30	1.7	40.0	30.9	19.0	SNR22
SIS105SM-R45R	0.45	±20	2.4	26.4	21.2	17.7	SMR45
SIS105SM-R80R	0.8	±20	4.1	20.8	16.7	13.0	SMR80
SIS105SM-1R3R	1.3	±20	5.3	16.8	13.4	11.2	SM1R3
SIS105SM-1R8R	1.8	±20	7.5	13.8	11.0	9.0	SM1R8
SIS105SM-2R5R	2.5	±20	10.5	11.8	9.6	7.8	SM2R5
SIS105SM-3R2R	3.2	±20	12.4	10.5	8.4	7.4	SM3R2
SIS105SM-4R0R	4.0	±20	18.0	9.3	7.4	6.2	SM4R0
SIS105SM-5R0R	5.0	±20	23.8	8.4	6.7	4.9	SM5R0
SIS105HN-R15R	0.15	±30	1.7	55.0	46.0	19.0	HNR15
SIS105HN-R30R	0.3	±30	2.4	40.0	33.0	17.7	HNR30
SIS105HM-R50R	0.5	±20	4.1	30.4	25.0	13.0	HMR50
SIS105HM-R80R	0.8	±20	5.3	25.2	20.7	11.2	HMR80
SIS105HM-1R2R	1.2	±20	7.5	21.0	17.4	9.0	HM1R2
SIS105HM-1R5R	1.5	±20	10.5	18.0	15.0	7.8	HM1R5
SIS105HM-2R2R	2.0	±20	12.4	15.8	13.1	7.4	HM2R0
SIS105HM-2R5R	2.5	±20	18.0	14.0	11.7	6.2	HM2R5
SIS105HM-3R0R	3.0	±20	23.8	12.6	10.5	4.9	HM3R0

**Notes:** 1. Ordering Information: SIS105L/S/Ha - bbbRc.

SIS105L/S/H = Product Type.

a = Tolerance of Inductance (M = ±20%; N = ±30%) ).

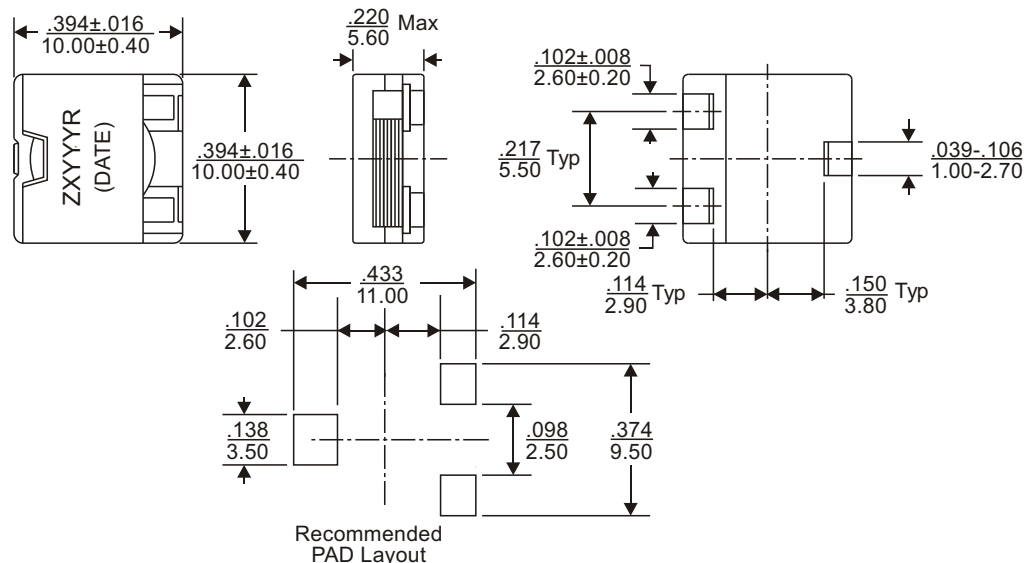
bbb = Inductance value in uH (i.e. R36 = 0.36uH; 1R4 = 1.4uH; 5R0 = 5.0uH ).

R = Internal Control Code.

c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).



### MECHANICAL DIMENSIONS

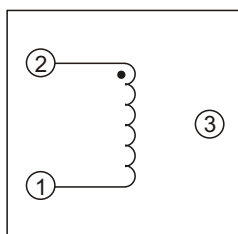


#### Notes:

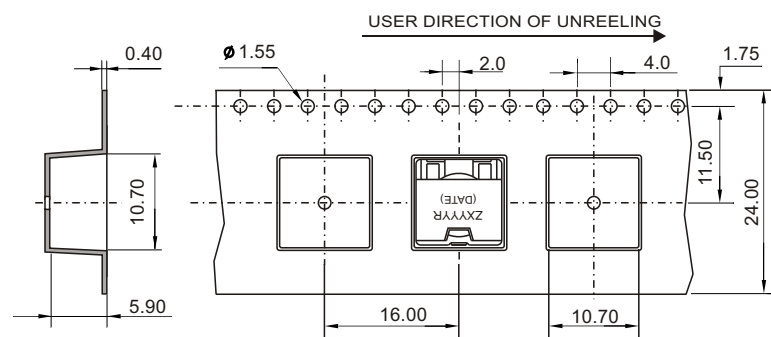
- Inductance is tested at 100kHz.
- Saturation current,  $I_{sat}$ , indicates the value of DC current when the inductance is 35% typical (while the tolerance is  $\pm 30\%$ ) or the inductance is 25% typical (while the tolerance is  $\pm 20\%$ ) lower than its nominal value.
- Heating current,  $I_{rms}$ , is the value of current when the temperature rising  $T=40^{\circ}\text{C}$  typical.
- Operating temperature range:  $-40^{\circ}\text{C}$  to  $+130^{\circ}\text{C}$ .
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
- All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
- Unless otherwise specified, all tolerances are  $\pm \frac{0.10}{0.25}$ .

Weight (in gram)	: 2.0 typ.
Tape & Reel	: 600 / reel

### SCHEMATIC



### PACKAGING



### FOR MORE INFORMATION, PLEASE CONTACT

#### HEADQUARTER

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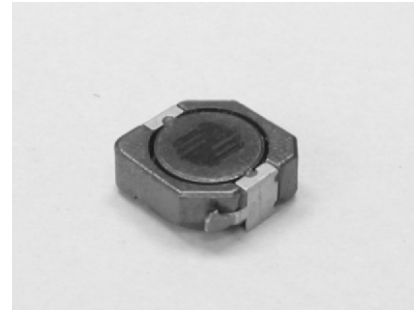
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**ELECTRICAL SPECIFICATION @ 25°C**

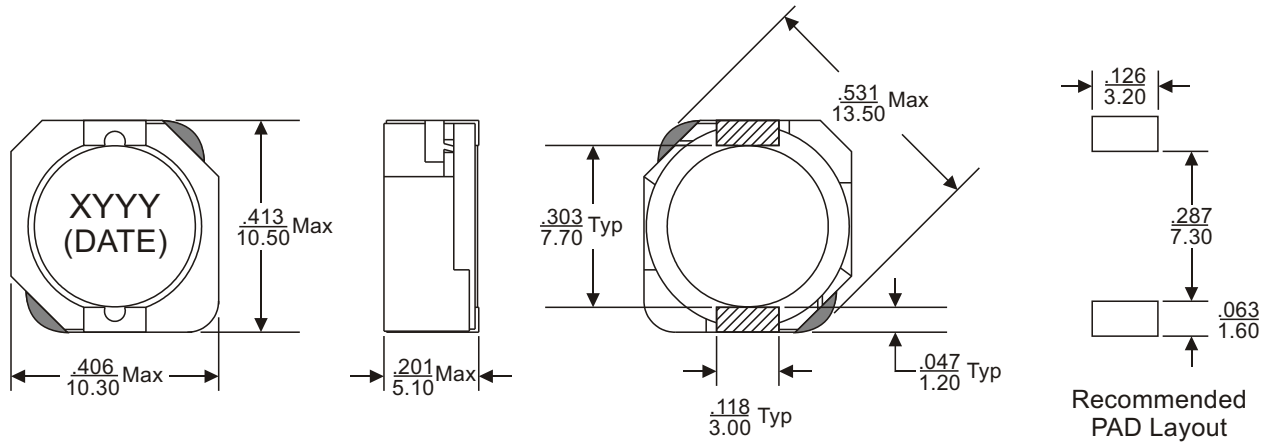
Part Number	Inductance (uH)	Inductance Tolerance	Test Frequency <sup>2</sup> (Hz)	DCR (m Max)	Rated DC Current <sup>3</sup> (A)	Marking (YYYY)
SIS105RN-0R8R	0.8	±30%	100k	4.3	7.50	N0R8
SIS105RN-1R5R	1.5	±30%	100k	5.8	7.00	N1R5
SIS105RN-2R2R	2.2	±30%	100k	7.2	6.30	N2R2
SIS105RN-3R3R	3.3	±30%	100k	10.4	5.75	N3R3
SIS105RN-4R7R	4.7	±30%	100k	12.3	4.75	N4R7
SIS105RN-6R8R	6.8	±30%	100k	18.0	4.10	N6R8
SIS105RN-8R2R	8.2	±30%	100k	20.0	4.00	N8R2
SIS105RN-100R	10	±30%	100k	26.0	3.75	N100
SIS105RN-150R	15	±30%	100k	41.0	2.65	N150
SIS105RN-220R	22	±30%	100k	61.0	1.80	N220
SIS105RN-330R	33	±30%	100k	84.0	1.65	N330
SIS105RN-470R	47	±30%	100k	130.0	1.50	N470
SIS105RN-560R	56	±30%	100k	149.0	1.45	N560
SIS105RN-680R	68	±30%	100k	201.0	1.20	N680
SIS105RN-820R	82	±30%	100k	227.0	0.95	N820
SIS105RN-101R	100	±30%	100k	253.0	0.90	N101
SIS105RN-151R	150	±30%	100k	370.0	0.80	N151
SIS105RN-221R	220	±30%	100k	500.0	0.70	N221
SIS105RN-331R	330	±30%	100k	812.0	0.50	N331

**Notes:**

- Ordering Information: SIS105Ra - bbbRc.  
 SIS105R = Product Type.  
 a = Tolerance of Inductance (N= ±30%).  
 bbb = Inductance value in uH (i.e. 1R5 = 1.5uH; 150 = 15uH; 151 = 150uH).  
 R = Internal Control Code.  
 c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).
- Test frequency is specified as the frequency for measuring the inductance.
- Rated D.C. current indicates the value of the current when the inductance is 35% lower than its initial value or D.C. current when the temperature rising T=30°C at D.C. Superposition.
- Operating temperature range: -40°C to +125°C.



MECHANICAL DIMENSIONS

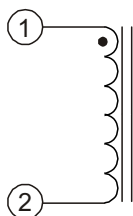


Notes:

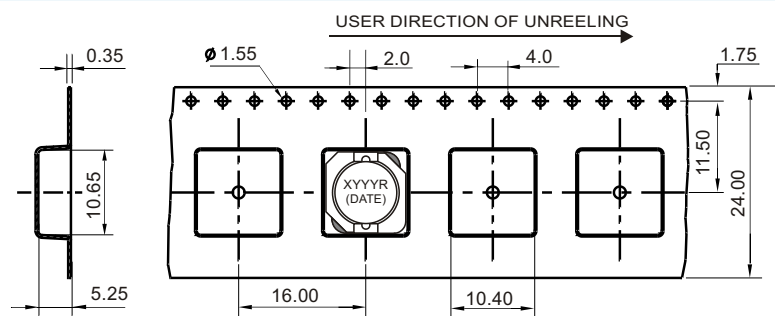
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
- All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
- Unless otherwise specified, all tolerances are  $\pm .010$  /  $\pm 0.25$ .

Weight (in gram)	: 3.0 typ.
Tape & Reel	: 700 / reel

SCHEMATIC



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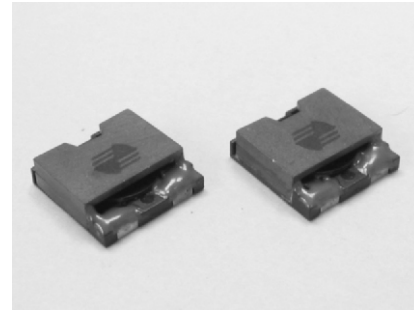
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ELECTRICAL SPECIFICATION @ 25°C

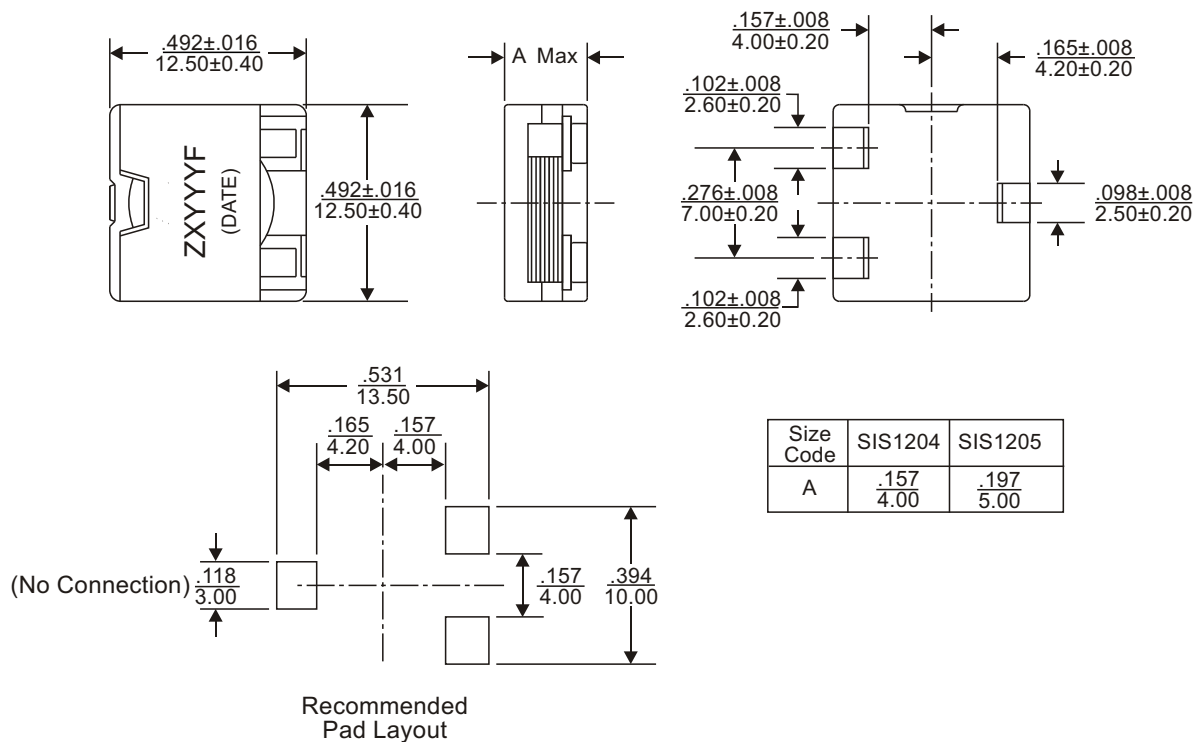
Part Number	Inductance <sup>2</sup> (uH $\pm$ 20%)	Inductance <sup>5</sup> @I <sub>rated</sub> (uH) Typ	I <sub>rated</sub> <sup>6</sup> Current (A)	DCR (m $\pm$ Max)	Saturation <sup>3</sup> Current (A)	Heating <sup>4</sup> Current (A)	Marking (ZXYYY)
SIS1204M-0R3F	0.3	0.26	17	1.7	22	17	4M0R3
SIS1204M-0R6F	0.6	0.50	14	3.0	18	14	4M0R6
SIS1204M-1R0F	1.0	0.89	11	4.5	15	11	4M1R0
SIS1204M-2R2F	2.2	1.89	9	6.8	9	9	4M2R2
SIS1204M-3R3F	3.3	2.89	8	11.2	8	8	4M3R3
SIS1204M-4R7F	4.7	4.19	6	15.4	6	6	4M4R7
SIS1204M-5R5F	5.5	4.90	5	15.4	5	5	4M5R5
SIS1205M-0R3F	0.33	0.27	25	0.8	33.2	25	5M0R3
SIS1205M-0R6F	0.60	0.53	23	1.75	28.3	23	5M0R6
SIS1205M-1R0F	1.0	0.89	18	3.6	22.8	18	5M1R0
SIS1205M-2R2F	2.2	1.86	14	7.5	15.5	14	5M2R2
SIS1205M-3R3F	3.3	2.63	12	10.4	12.2	12	5M3R3
SIS1205M-4R7F	4.7	3.95	9.3	12.4	10.2	9.3	5M4R7
SIS1205M-5R5F	5.5	4.38	8.2	12.4	8.2	9.3	5M5R5

**Notes:**

- Ordering Information: SIS1204/5a - bbbFc.  
SIS1204/5 = Product Type.  
a = Tolerance of Inductance (M =  $\pm$ 20% ).  
bbb = Inductance value in uH (i.e. 0R3 = 0.3uH; 3R3 = 3.3uH ).  
F = Internal Control Code.  
c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).
- Inductance is tested at 0.25Vrms, 100kHz.
- Saturation current, I<sub>sat</sub>, indicates the value of DC current when the inductance is 10% typical (20% typical for SIS1205 series) lower than its initial value or the current when the temperature rising T=40°C, whichever is lower.
- Heating current, I<sub>rms</sub>, is the value of current when the temperature rising T=40°C typical.
- Rated inductance is for reference only.
- The rated current listed is the lower of the saturation current @25°C or the heating current.
- Operating temperature range: -40°C to +130°C.
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



**MECHANICAL DIMENSIONS**

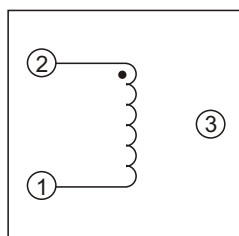


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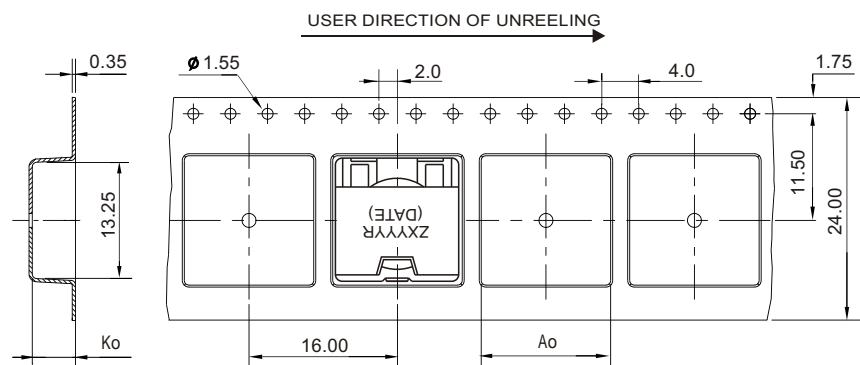
- All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
- Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

	SIS1204	SIS1205
Weight (in gram.):	2.0 typ.	2.5 typ.
Tape & Reel:	850 / reel	700 / reel
Pocket Length (Ao)	13.05	13.25
Pocket Depth (Ko)	4.30	5.30

**SCHEMATIC**



**PACKAGING**



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Email: eempl@eleceltek.com

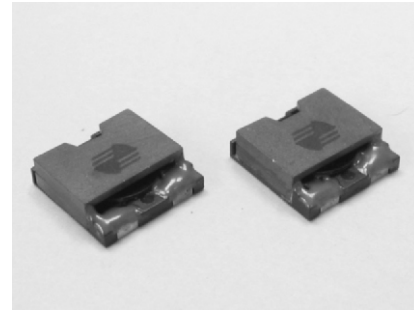
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-  Magnetically Shielded
-  High energy storage
-  Ideal for high current requirements of notebook, video recorders and other DC-DC conversion applications
-  Custom inductance value or tolerance is available
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Inductance <sup>2</sup> (uH)	Inductance Tolerance (%)		DCR (m Max)	Saturation Current <sup>3</sup> (A)	Heating Current <sup>4</sup> (A)	Marking (ZXYYY)
		M	N				
SIS125LN-0R6R	0.68	N/A	±30	1.5	20.4	19.5	LN0R6
SIS125LM-1R5R	1.5	±20	N/A	2.2	14.0	18.0	LM1R5
SIS125LM-2R5R	2.5	±20	N/A	3.4	10.0	15.5	LM2R5
SIS125LM-4R0R	4.0	±20	N/A	5.4	8.3	12.5	LM4R0
SIS125LM-6R0R	6.0	±20	N/A	8.0	6.7	9.9	LM6R0
SIS125LM-8R2R	8.2	±20	N/A	11.4	5.8	8.2	LM8R2
SIS125LM-100R	10	±20	N/A	13.5	5.0	7.6	LM100
SIS125HN-0R4R	0.47	N/A	±30	1.5	28.8	19.5	HN0R4
SIS125HM-1R0R	1.0	±20	N/A	2.2	20.0	18.0	HM1R0
SIS125HM-1R8R	1.8	±20	N/A	3.4	15.3	15.5	HM1R8
SIS125HM-2R8R	2.8	±20	N/A	5.4	12.3	12.5	HM2R8
SIS125HM-4R0R	4.0	±20	N/A	8.0	10.3	9.9	HM4R0
SIS125HM-5R6R	5.6	±20	N/A	11.4	8.8	8.2	HM5R6
SIS125HM-7R2R	7.2	±20	N/A	13.5	7.8	7.6	HM7R2
SIS125UN-0R3R	0.35	N/A	±30	1.5	35.0	19.5	UN0R3
SIS125UN-0R8R	0.8	N/A	±30	2.2	25.7	18.0	UN0R8
SIS125UM-1R4R	1.4	±20	N/A	3.4	19.2	15.5	UM1R4
SIS125UM-2R2R	2.2	±20	N/A	5.4	14.8	12.5	UM2R2
SIS125UM-3R2R	3.2	±20	N/A	8.0	12.8	9.9	UM3R2
SIS125UM-4R3R	4.3	±20	N/A	11.4	11.0	8.2	UM4R3
SIS125UM-5R6R	5.6	±20	N/A	13.5	9.5	7.6	UM5R6

**Notes:**

1. Ordering Information: SIS125L/H/Ua - bbbRc.

SIS125L/H/U = Product Type.

a = Tolerance of Inductance (M = ±20%; N = ±30%) ).

bbb = Inductance value in uH (i.e. 0R4 = 0.47uH; 6R0=6.0uH; 5R6 = 5.6uH ).

R = Internal Control Code.

c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).

2. Inductance is tested at 100kHz.

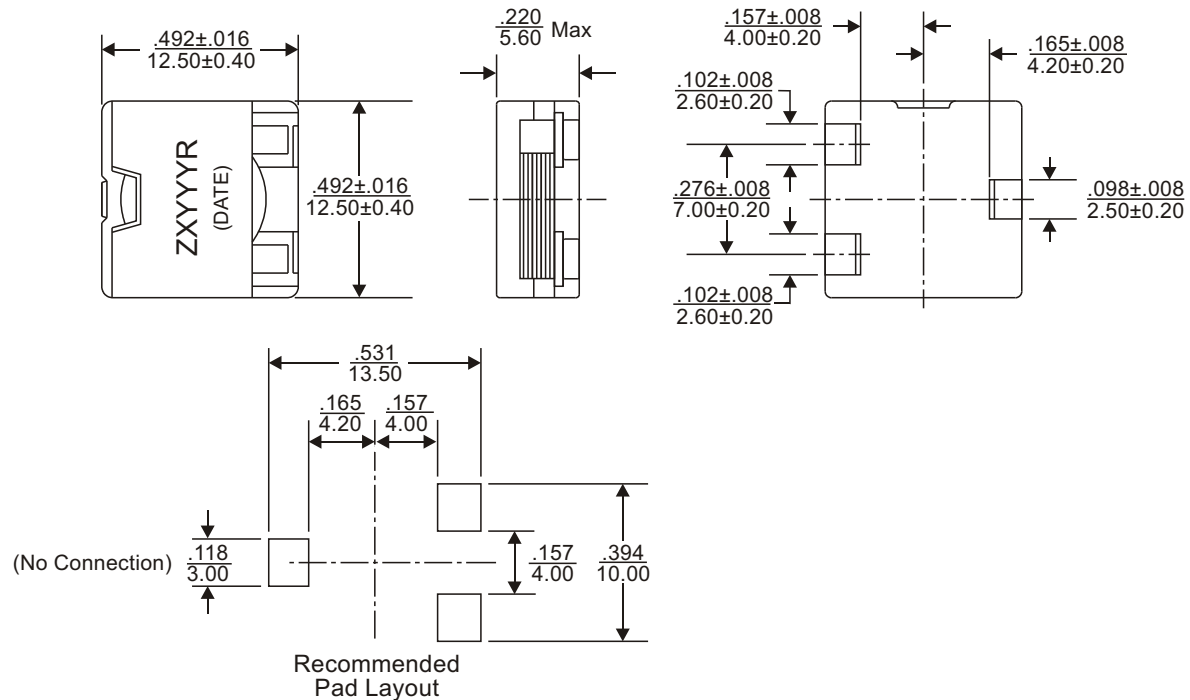
3. Saturation current, Isat, indicates the value of DC current when the inductance is 35% typical (while the tolerance is ±30%) or 25% typical (while the tolerance is ±20%) lower than its initial value.

4. Heating current, Irms, is the value of current when the temperature rising T=40°C typical.

5. Operating temperature range: -40°C to +130°C.



**MECHANICAL DIMENSIONS**

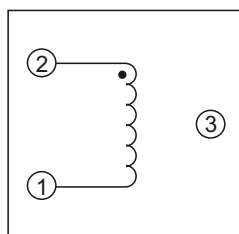


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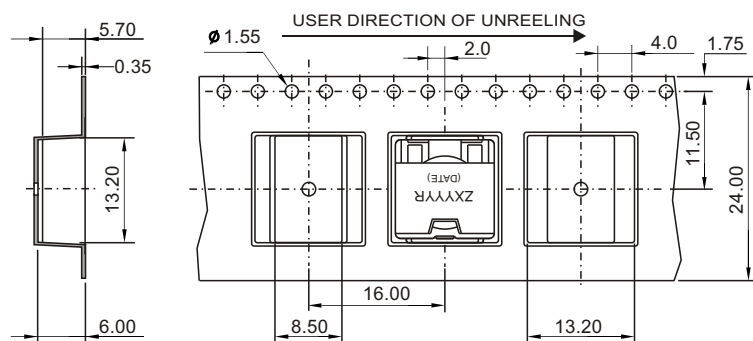
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
- All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
- Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 2.5 typ.
Tape & Reel	: 600 / reel

**SCHEMATIC**



**PACKAGING**



**FOR MORE INFORMATION, PLEASE CONTACT**

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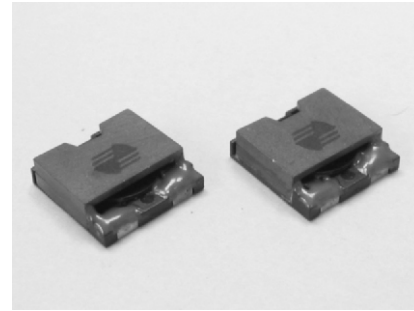
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**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Inductance <sup>2</sup> (uH)	Inductance Tolerance (%)	DCR (m Max)	Rated DC <sup>3</sup> Current (A)	Marking (ZYYYY)
SIS134LN-0R4R	0.4	±30	1.9	18.5	LN0R4
SIS134LM-0R9R	0.9	±20	2.5	17.0	LM0R9
SIS134LM-1R6R	1.6	±20	3.7	15.0	LM1R6
SIS134LM-2R5R	2.5	±20	6.6	10.5	LM2R5
SIS134LM-3R6R	3.6	±20	10.8	8.0	LM3R6
SIS134LM-4R8R	4.8	±20	12.0	7.5	LM4R8
SIS134LM-6R4R	6.4	±20	16.3	7.0	LM6R4
SIS134LM-8R0R	8.0	±20	18.4	6.5	LM8R0
SIS134HN-0R3R	0.3	±30	1.9	18.5	HN0R3
SIS134HN-0R6R	0.66	±30	2.5	17.0	HN0R6
SIS134HM-1R2R	1.2	±20	3.7	15.0	HM1R2
SIS134HM-1R8R	1.8	±20	6.6	10.5	HM1R8
SIS134HM-2R7R	2.7	±20	10.8	8.0	HM2R7
SIS134HM-3R6R	3.6	±20	12.0	7.5	HM3R6
SIS134HM-4R8R	4.8	±20	16.3	7.0	HM4R8
SIS134HM-6R0R	6.0	±20	18.4	6.5	HM6R0

**Notes:**

1. Ordering Information: SIS134L/Ha - bbbRc.

SIS134L/H = Product Type.

a = Tolerance of Inductance (M = ±20%; N = ±30%) .

bbb = Inductance value in uH (i.e. 0R4 = 0.4uH; 3R6 = 3.6uH ).

R = Internal Control Code.

c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).

2. Inductance is tested at 100kHz.

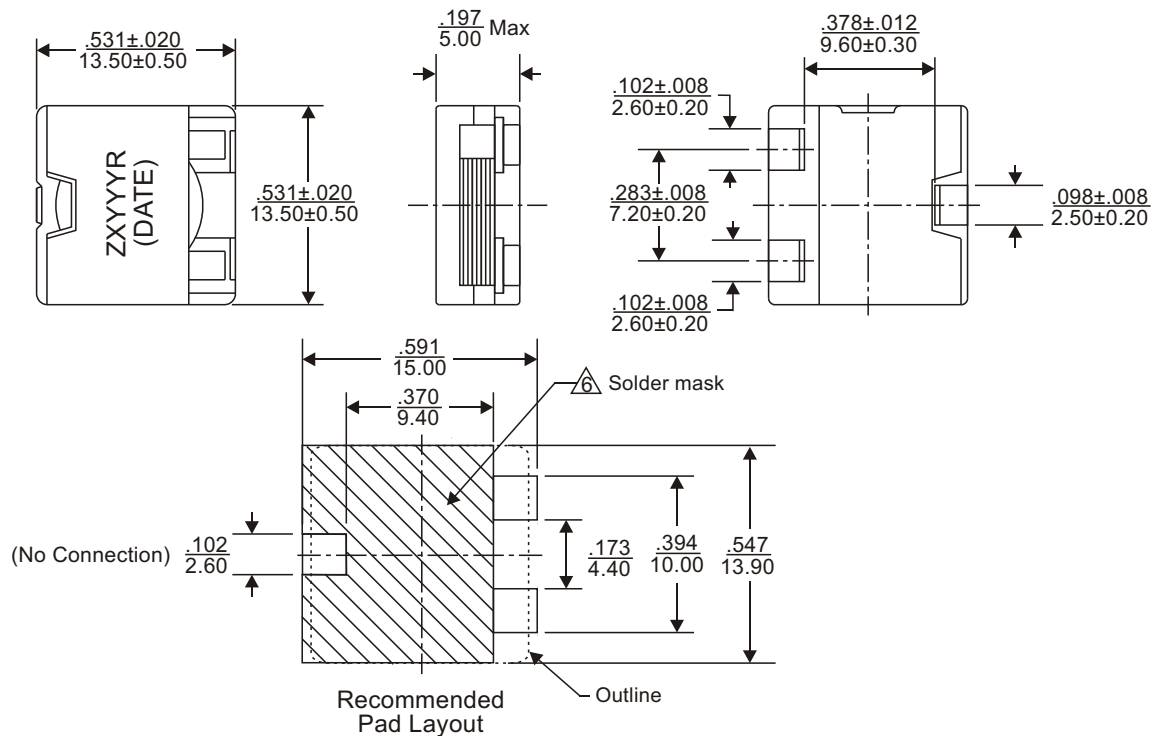
3. Rated D.C. current indicates the value of the current when the inductance is 35% (tolerance is ±30%) or 25% (tolerance is ±20%) lower than its initial value and the temperature rising T=40°C at D.C. Superposition.

4. Operating temperature range: -40°C to +130°C.

5. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



**MECHANICAL DIMENSIONS**

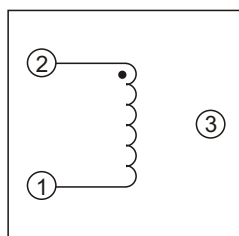


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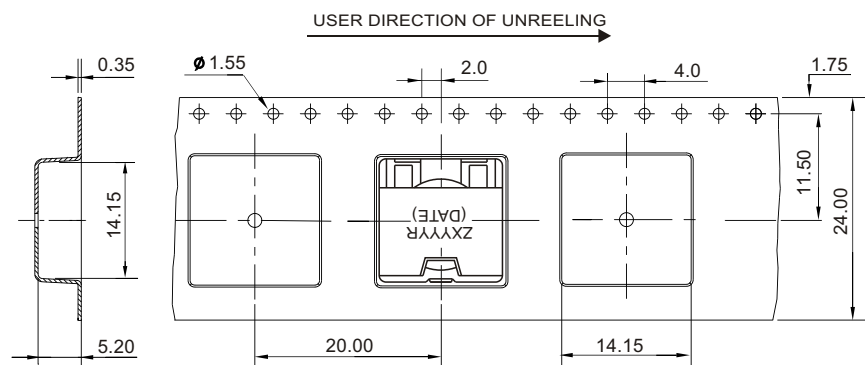
6. In order to prevent short-circuiting, solder mask is recommended.
7. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
8. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 3.0 typ.
Tape & Reel	: 550 / reel

**SCHEMATIC**



**PACKAGING**



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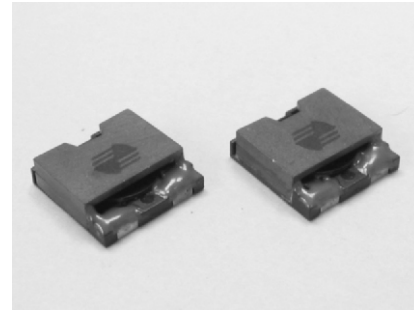
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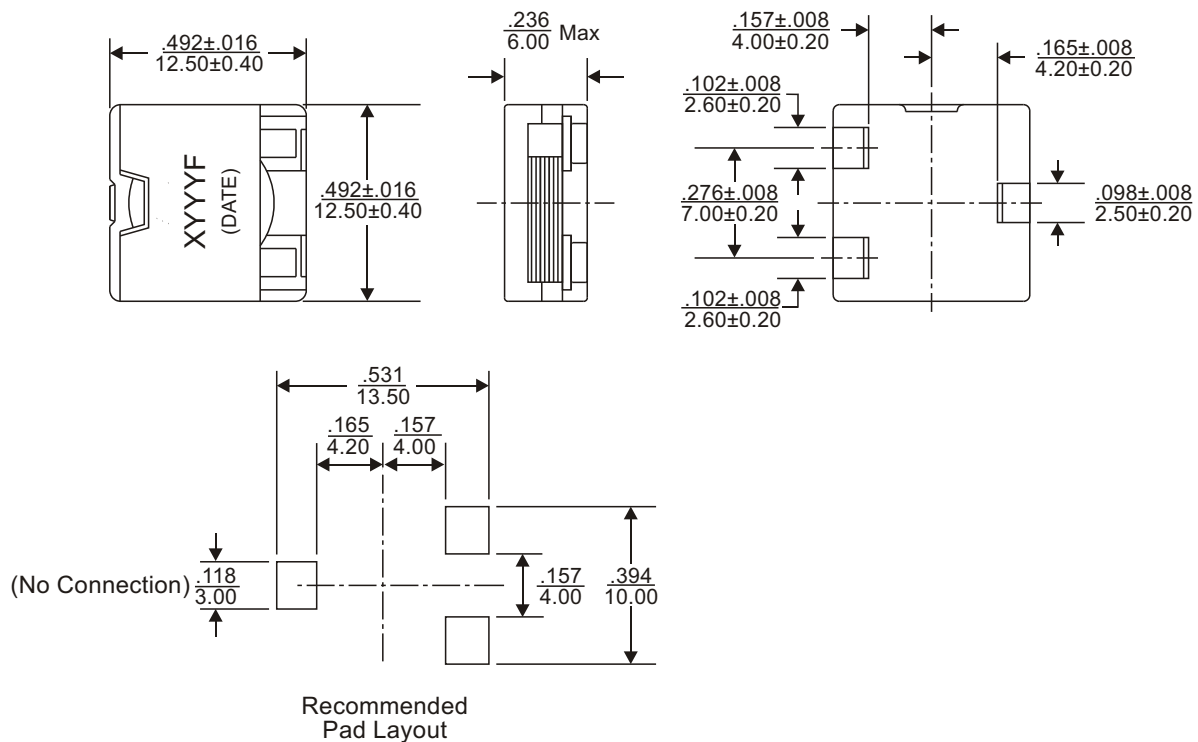
**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Inductance <sup>3</sup> (uH)	Inductance Tolerance <sup>2</sup> (%)		Inductance <sup>6</sup> @ Irated (uH) Typ	Irated <sup>7</sup> Current (A)	DCR (m Max)	Saturation <sup>4</sup> Current (A)	Heating <sup>5</sup> Current (A)	Marking (YYYY)	
		L	M						L:±15%	M:±20%
SIS1206X-0R2F	0.2	±15%	±20%	0.18	25	1.0	30	25	L0R2	M0R2
SIS1206X-0R3F	0.33	±15%	±20%	0.32	25	0.8	38	25	L0R3	M0R3
SIS1206X-0R6F	0.6	±15%	±20%	0.51	25	0.8	23	25	L0R6	M0R6
SIS1206X-1R0F	1.0	±15%	±20%	0.89	15	1.75	20	15	L1R0	M1R0
SIS1206X-2R1F	2.1	±15%	±20%	1.89	12	3.6	15	12	L2R1	M2R1
SIS1206X-3R1F	3.1	±15%	±20%	2.81	9	7.5	12	9	L3R1	M3R1
SIS1206X-4R2F	4.2	±15%	±20%	3.82	8.5	7.5	10	8.5	L4R2	M4R2
SIS1206X-4R6F	4.6	±15%	±20%	4.18	8.0	10.4	9	8	L4R6	M4R6
SIS1206X-5R5F	5.5	±15%	±20%	5.18	7.5	12.4	8	7.5	L5R5	M5R5

**Notes:**

- Ordering Information: SIS1206X - bbbFc.  
 SIS1206 = Product Type.  
 X = Tolerance of Inductance (L = ±15%; M = ±20%).  
 bbb = Inductance value in uH (i.e. 0R6 = 0.6uH; 4R6 = 4.6uH ).  
 F = Internal Control Code.  
 c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).
- Add the tolerance code of inductance by replacing "X" of the part number by: L=±15% or M=±20%.
- Inductance is tested at 0.25Vrms, 100kHz.
- Saturation current, Isat, indicates the value of DC current when the inductance is 10% typical lower than its initial value.
- Heating current, Irms, is the value of current when the temperature rising T=40°C typical.
- Rated inductance is for reference only.
- The rated current listed is the lower of the saturation current @25°C or the heating current.
- Operating temperature range: -40°C to +130°C.
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

## MECHANICAL DIMENSIONS



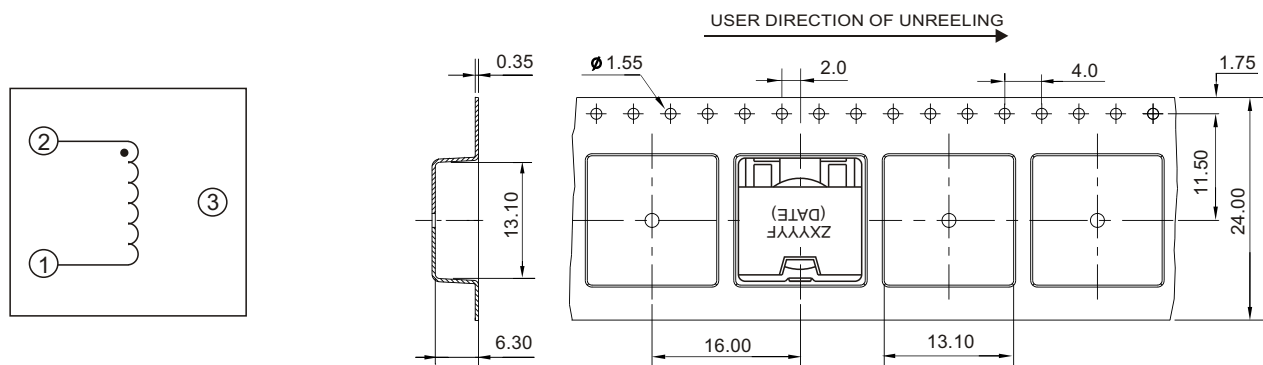
Notes:

10. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
11. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 2.5 typ.
Tape & Reel	: 550 / reel

## SCHEMATIC

## PACKAGING



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**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Inductance <sup>2</sup> (uH $\pm$ 20%)	DCR (m Max)	SRF (MHz Typ)	Isat <sup>3</sup> (A)	Irms <sup>4</sup> (A)	Marking (YYYY)
SIS5022M-103F	10	40	30	8.0	3.9	M103
SIS5022M-153F	15	48	20	7.0	3.4	M153
SIS5022M-223F	22	59	18	6.0	3.1	M223
SIS5022M-333F	33	75	14	5.0	2.8	M333
SIS5022M-473F	47	97	10	4.0	2.4	M473
SIS5022M-683F	68	138	9	3.0	2.0	M683
SIS5022M-104F	100	207	7	2.4	1.7	M104
SIS5022M-154F	150	293	6	2.1	1.3	M154
SIS5022M-224F	220	470	5	1.9	1.1	M224
SIS5022M-334F	330	780	4	1.1	0.86	M334
SIS5022M-474F	470	1080	3	1.1	0.73	M474
SIS5022M-684F	680	1400	2.5	0.96	0.64	M684
SIS5022M-105F	1000	2010	2	0.80	0.53	M105

**Notes:**

1. Ordering Information: SIS5022a - bbbFc.

SIS5022 = Product Type.

a = Tolerance of Inductance (M=  $\pm$ 20%).

bbb = Inductance value in uH (i.e. 153 = 15uH; 154 = 150uH; 105 = 1000uH).

F = Internal Control Code.

c = Packaging Code (U = Tape & Reel Packaging in 7 inch Reel).

2. Inductance is tested at 0.1Vrms, 100kHz.

3. Saturation current, Isat, indicates the value of DC current when the inductance is 10% typical lower than its initial value.

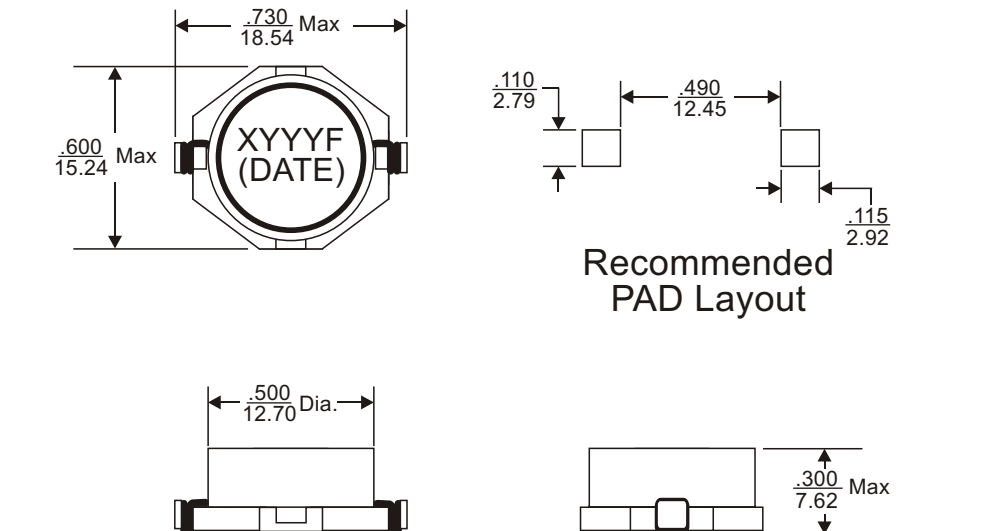
4. Heating current, Irms, is the value of current when the temperature rising T=40°C typical.

5. Operating temperature range: -40°C to +125°C.

6. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



**MECHANICAL DIMENSIONS**

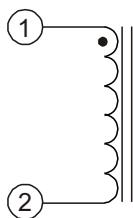


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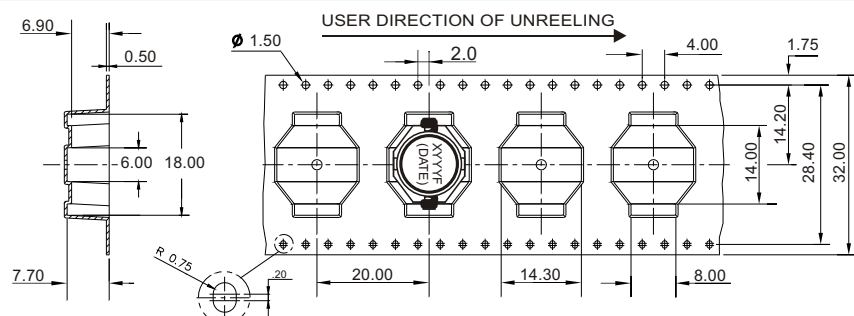
7. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
8. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 2.5 typ.
Tape & Reel	: 350 / reel

**SCHEMATIC**



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-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Inductance <sup>2</sup> (uH)	Inductance Tolerance	DCR (m Typ)	Inductance Decrease <sup>3</sup> Current(A)	Temperature Rise <sup>4</sup> Current(A)	Marking (YYYY)
SIS6360M-1R0R	1.0	± 20%	11	3.59	4.03	M1R0
SIS6360M-1R5R	1.5	± 20%	13	2.93	3.63	M1R5
SIS6360M-2R2R	2.2	± 20%	16	2.42	3.30	M2R2
SIS6360M-3R6R	3.6	± 20%	21	1.89	2.83	M3R6
SIS6360M-4R7R	4.7	± 20%	27	1.66	2.45	M4R7
SIS6360M-6R2R	6.2	± 20%	32	1.45	2.20	M6R2
SIS6360M-100R	10.0	± 20%	49	1.14	1.77	M100
SIS6360M-120R	12.0	± 20%	52	1.04	1.70	M120
SIS6360M-150R	15.0	± 20%	62	0.93	1.55	M150
SIS6360M-180R	18.0	± 20%	74	0.85	1.41	M180
SIS6360M-220R	22.0	± 20%	95	0.77	1.23	M220
SIS6360M-270R	27.0	± 20%	120	0.70	1.08	M270
SIS6360M-330R	33.0	± 20%	140	0.63	0.99	M330
SIS6360M-390R	39.0	± 20%	150	0.58	0.95	M390
SIS6360M-470R	47.0	± 20%	185	0.53	0.84	M470
SIS6360M-560R	56.0	± 20%	220	0.48	0.76	M560
SIS6360M-680R	68.0	± 20%	270	0.44	0.69	M680
SIS6360M-820R	82.0	± 20%	330	0.40	0.61	M820
SIS6360M-101R	100.0	± 20%	415	0.36	0.54	M101
SIS6360M-151R	150.0	± 20%	615	0.31	0.42	M151

**Notes:**

1. Ordering Information: SIS6360a - bbbRc.

SIS6360 = Product Type.

a = Tolerance of Inductance (M= ±20%).

bbb = Inductance value in uH (i.e. 1R5 = 1.5uH; 150 = 15uH; 151 = 150uH).

R = Internal Control Code.

c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).

2. Inductance is tested at 100kHz.

3. Rated D.C. current indicates the value of the current when the inductance is 30% typical lower than its initial Value.

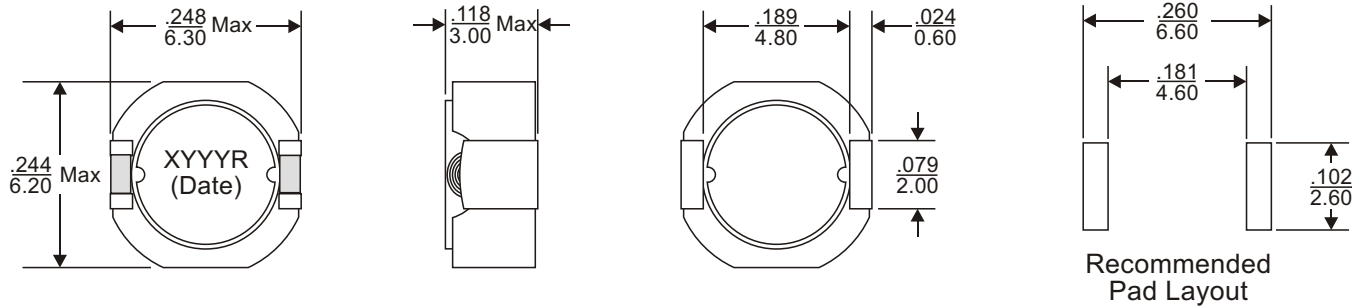
4. Temperature rise current is the value of current when the temperature rising T=40°C.

5. Operating temperature range: -40°C to +125°C.

6. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



MECHANICAL DIMENSIONS

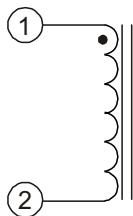


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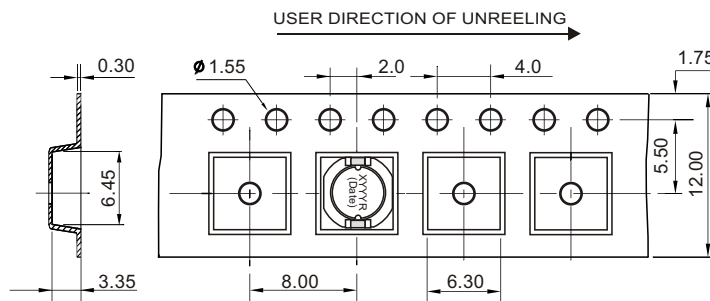
7. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
8. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 0.5 typ.
Tape & Reel	: 2300 / reel

SCHEMATIC



PACKAGING



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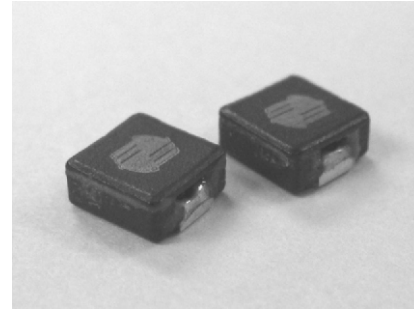
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-  Available in low profile and used in high power application
-  Large permissible DC current
-  Ideal for computers and portable power devices, DC-DC converters, energy storage applications and Input-Output filter applications
-  Operating temperature -40 C to +130 C
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Rated Inductance ( H Typ)	Inductance <sup>2</sup> ( H 15%)	I <sub>rms</sub> <sup>3</sup> (A)	Isat <sup>4</sup> (A) Approx. 10%	Isat <sup>5</sup> (A) Approx. 15%	DCR (m Max)	Volts- Sec <sup>6</sup> Typ	Marking (YYYY)
SIS6572L-R10R	0.10	0.10	19.0	27.0	34.7	1.21	0.25	LR10
SIS6572L-R20R	0.20	0.22	15.3	16.0	20.8	1.88	0.42	LR20
SIS6572L-R47R	0.47	0.44	10.9	11.6	14.9	3.67	0.59	LR47
SIS6572L-R68R	0.68	0.72	9.72	9.0	11.6	4.63	0.76	LR68
SIS6572L-1R0R	1.00	1.10	6.26	7.4	9.5	11.2	0.92	L1R0
SIS6572L-1R5R	1.50	1.50	5.78	6.2	8.0	13.1	1.09	L1R5
SIS6572L-2R0R	2.00	2.00	5.40	5.4	6.9	15.0	1.26	L2R0
SIS6572L-3R3R	3.30	3.20	3.63	4.3	5.5	30.0	1.60	L3R3
SIS6572L-4R7R	4.70	4.70	3.23	3.5	4.2	40.0	1.93	L4R7
SIS6572L-8R2R	8.20	8.50	2.91	2.6	3.4	74.0	2.61	L8R2
SIS6572L-150R	15.00	14.90	2.22	2.0	2.5	127	3.45	L150

**Notes:**

1. Ordering Information: SIS6572a - bbbRc.

SIS6572 = Product Type.

a = Tolerance of Inductance (L =  $\pm 15\%$ ).

bbb = Inductance value in uH (i.e. R47 = 0.47uH; 4R7 = 4.7uH ).

R = Internal Control Code.

c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).

2. Inductance is tested at 100kHz, 0.1Vrms, 0Adc.

3. Heating current, I<sub>rms</sub>, is the current required to raise the component temperature by approximately 40 C, excluding the core loss.

4. Saturation current, Isat, is the DC current at which the inductance of the component drops by approximately 10%.

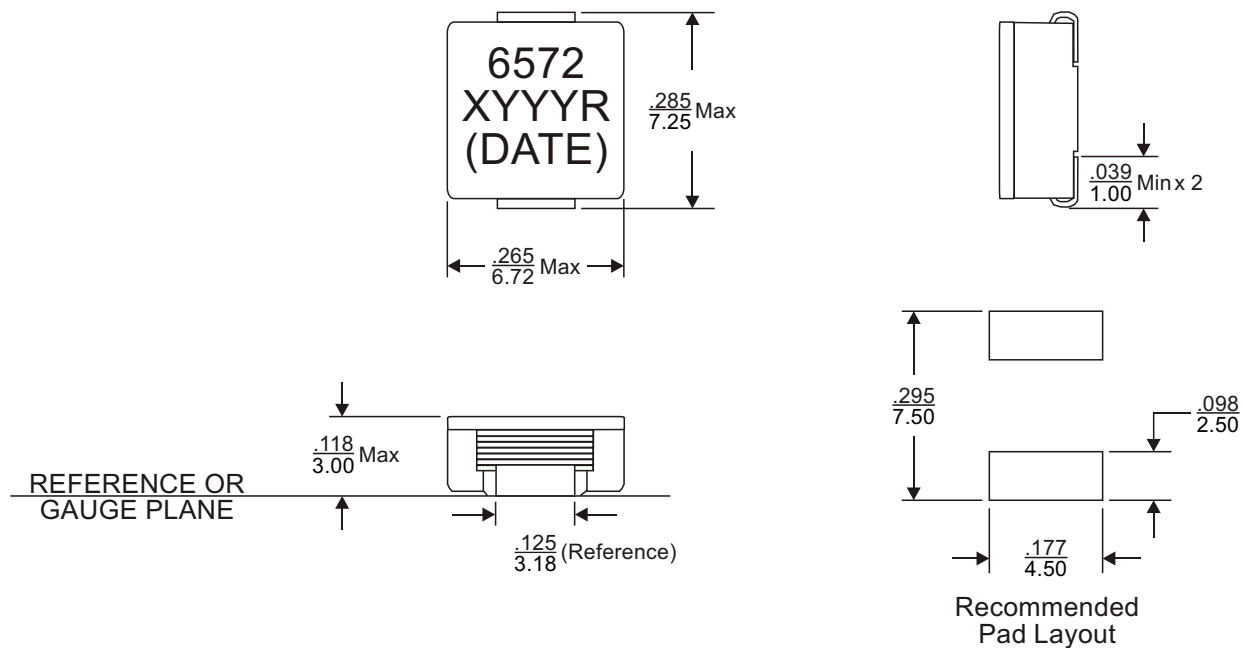
5. Saturation current, Isat, is the DC current at which the inductance of the component drops by approximately 15%.

6. This value represents the applied V- S at 500kHz necessary to generate a core loss equal to 10% of the total losses for 40 C temperature rise.

7. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



**MECHANICAL DIMENSIONS**

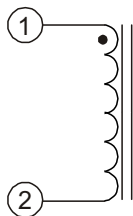


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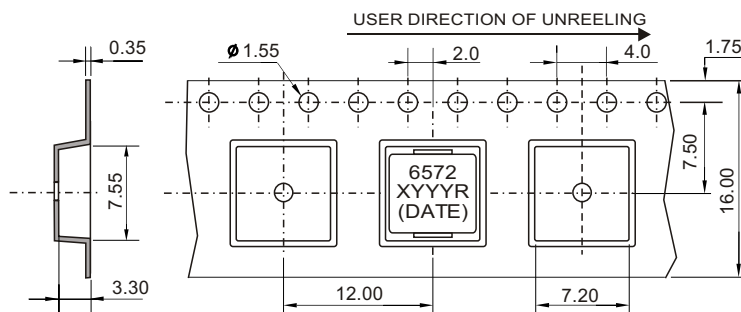
8. All dimensions are specified in inches with higher precedence in mm.
9. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 1.0 typ.
Tape & Reel	: 1500 / reel

**SCHEMATIC**



**PACKAGING**



**FOR MORE INFORMATION, PLEASE CONTACT**

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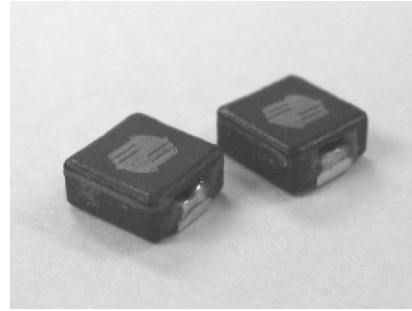
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-  Available in low profile and used in high power application
-  Large permissible DC current
-  Ideal for computers and portable power devices, DC-DC converters, energy storage applications and Input-Output filter applications
-  Operating temperature -40 C to +130 C
-  RoHS compliant versions are available



**ELECTRICAL SPECIFICATION @ 25°C**

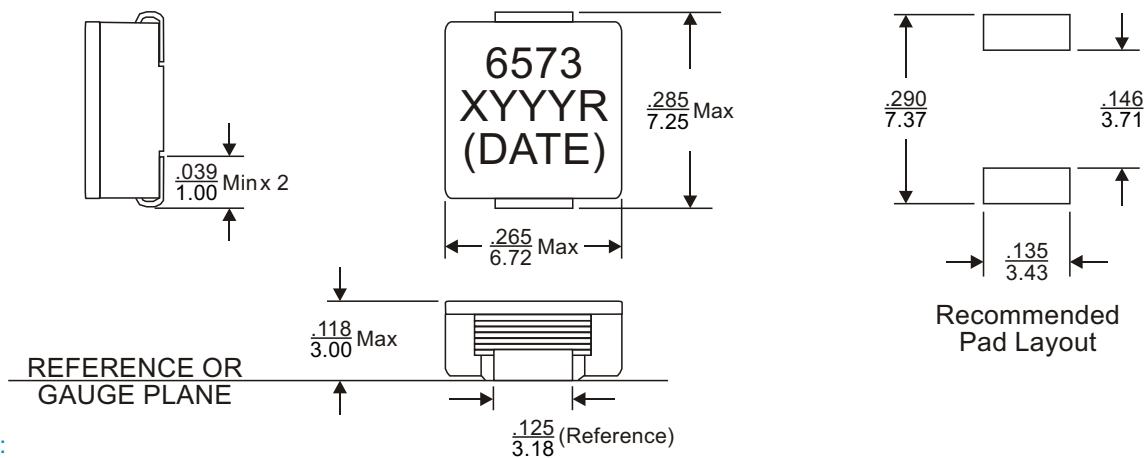
Part Number	Inductance <sup>2</sup> ( H 20%)	DCR (m Max)	Rated <sup>3</sup> Current (A)	Test <sup>4</sup> Frequency (kHz)	Marking (YYYY)
SIS6573M-R10R	0.10	1.7	22.0	100	MR10
SIS6573M-R15R	0.15	2.5	19.5	100	MR15
SIS6573M-R20R	0.20	3.0	17.0	100	MR20
SIS6573M-R33R	0.33	3.9	15.0	100	MR33
SIS6573M-R47R	0.47	4.2	12.5	100	MR47
SIS6573M-R68R	0.68	5.5	10.5	100	MR68
SIS6573M-1R0R	1.00	10.0	8.5	100	M1R0
SIS6573M-1R5R	1.50	15.0	6.5	100	M1R5
SIS6573M-2R2R	2.20	20.0	5.7	100	M2R2
SIS6573M-3R3R	3.30	30.0	4.5	100	M3R3
SIS6573M-4R7R	4.70	40.0	3.9	100	M4R7
SIS6573M-6R8R	6.80	60.0	3.2	100	M6R8
SIS6573M-8R2R	8.20	74.0	2.91	100	M8R2
SIS6573M-150R	15.0	127.0	2.22	100	M150
SIS6573M-220R	22.0	135.0	2.20	100	M220

**Notes:**

- Ordering Information: SIS6573a - bbbRc.  
SIS6573 = Product Type.  
a = Tolerance of Inductance (M =  $\pm 20\%$ ).  
bbb = Inductance value in  $\mu\text{H}$  (i.e. R47 =  $0.47\mu\text{H}$ ; 4R7 =  $4.7\mu\text{H}$ ; 150 =  $15\mu\text{H}$ ).  
R = Internal Control Code.  
c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).
- Inductance is tested at 100kHz, 0.1Vrms, 0Adc.
- Rated current indicates the current value when the inductance drops by approximate 10% of its initial value or for an approximate 40 C temperature rise.
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



### MECHANICAL DIMENSIONS

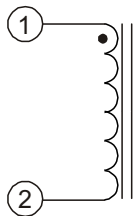


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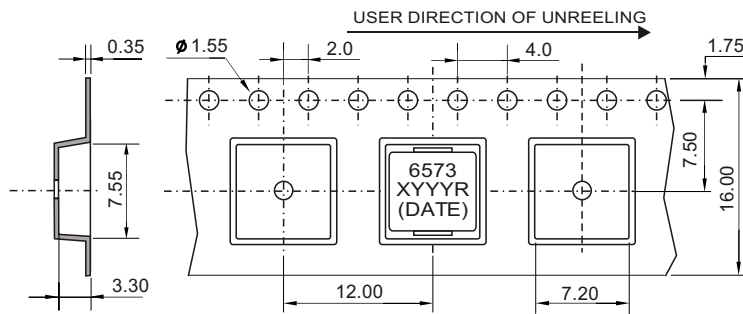
- All dimensions are specified in inches with higher precedence in mm.
- Unless otherwise specified, all tolerances are  $\pm \frac{.010}{.025}$ .

Weight (in gram)	: 1.0 typ.
Tape & Reel	: 1500 / reel

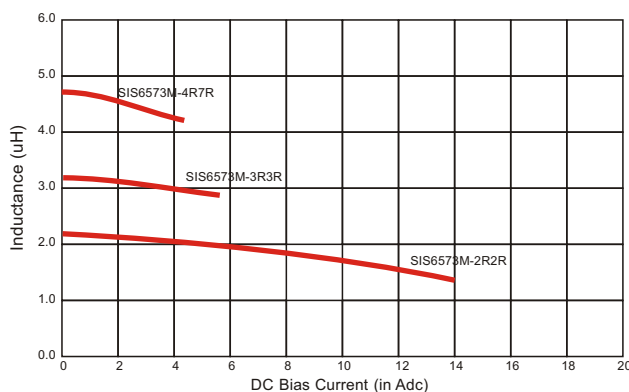
### SCHEMATIC



### PACKAGING



### Inductance vs DC Bias Curves



Typical Inductance versus DC Bias Current,  
measured at 25deg.C

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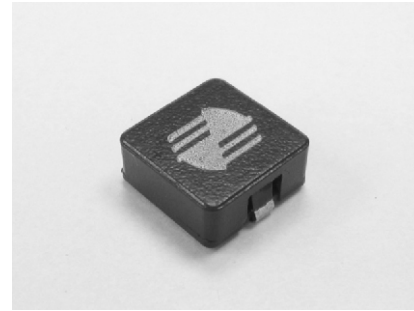
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-  Used in high power application
-  Large permissible DC current
-  Ideal for computers and portable power devices, DC-DC converters, energy storage applications and Input-Output filter applications
-  Operating temperature -40 C to +130 C
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

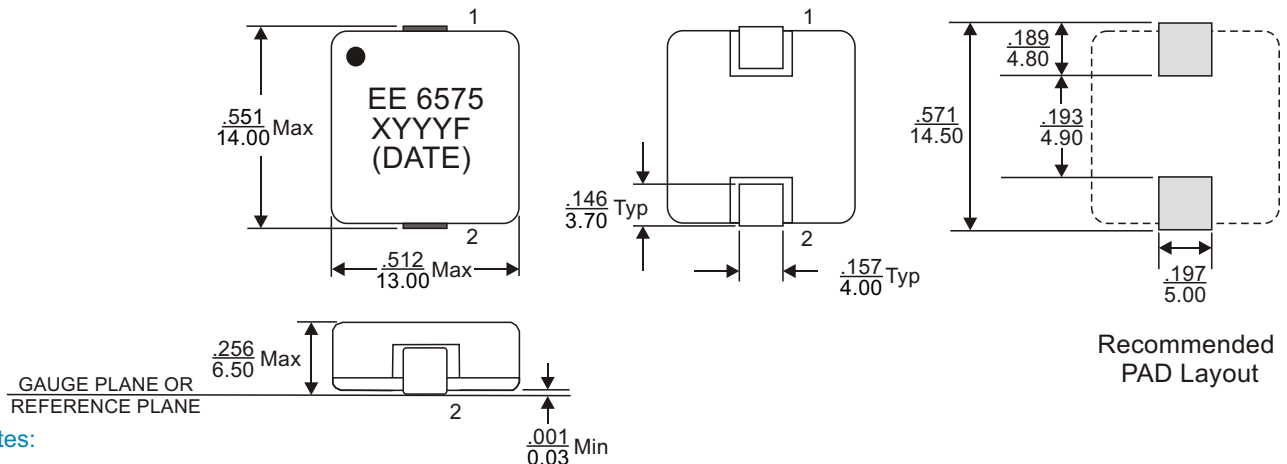
Part Number	Inductance <sup>2</sup> @0Adc ( H 20%)	DCR (m Max)	Saturation <sup>3</sup> Current Isat(A)	Heating <sup>4</sup> Current Irms(A)	Marking (YYYY)
SIS6575M-R18F	0.18	0.50	60	33	MR18
SIS6575M-R40F	0.40	1.00	48	24	MR40
SIS6575M-R80F	0.80	1.30	38	21	MR80
SIS6575M-1R4F	1.40	2.10	28	18	M1R4
SIS6575M-2R0F	2.00	2.90	24	16	M2R0

**Notes:**

- Ordering Information: SIS6575a - bbbFc.  
 SIS6575 = Product Type.  
 a = Tolerance of Inductance (M =  $\pm 20\%$ ).  
 bbb = Inductance value in uH (i.e. R40 = 0.40uH; 1R4 = 1.4uH ).  
 F = Internal Control Code.  
 c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).
- Inductance is tested at 100kHz, 0.1Vrms, 0Adc.
- Saturation current, Isat, is the DC current at which the inductance of the component drops by 20% typical at ambient temperature of 25 C.
- Heating current, Irms, is the current required to raise the part temperature by approximately 40 C.
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



### MECHANICAL DIMENSIONS

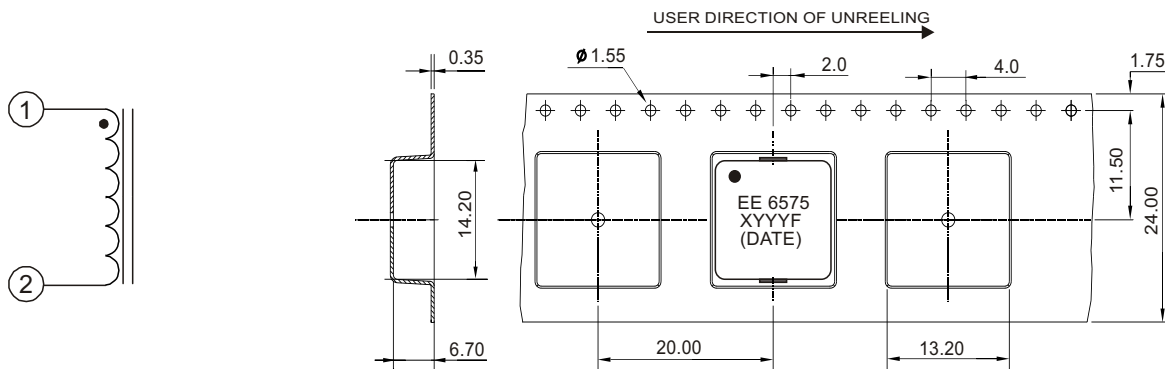


6. All dimensions are specified in inches with higher precedence in mm.
7. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

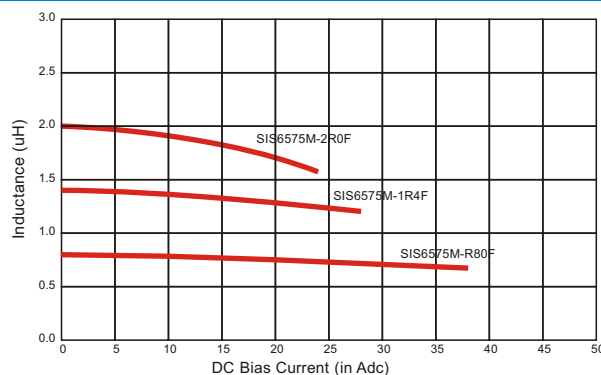
Weight (in gram)	: 3.5 typ.
Tape & Reel	: 350 / reel

### SCHEMATIC

### PACKAGING



### Inductance vs DC Bias Curves



Typical Inductance versus DC Bias Current,  
measured at 25deg.C

### FOR MORE INFORMATION, PLEASE CONTACT

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-  Magnetically Shielded
-  Miniature in size and high energy storage
-  Ideal for high current requirements of notebook, video recorders and other DC-DC conversion applications
-  Custom inductance value or tolerance is available
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Inductance (uH)	Inductance Tolerance	Test Frequency <sup>2</sup> (Hz)	DCR (Max)	Rated DC Current <sup>3</sup> (A)	Marking (YYYY)
SISCDRH74M-R33R	0.33	±20%	100k	17m	8.50	MR33
SISCDRH74M-3R3R	3.3	±20%	100k	30m	4.50	M3R3
SISCDRH74M-100R	10	±20%	1k	49m	1.84	M100
SISCDRH74M-120R	12	±20%	1k	58m	1.71	M120
SISCDRH74M-150R	15	±20%	1k	81m	1.47	M150
SISCDRH74M-180R	18	±20%	1k	91m	1.31	M180
SISCDRH74M-220R	22	±20%	1k	0.11	1.23	M220
SISCDRH74M-270R	27	±20%	1k	0.15	1.12	M270
SISCDRH74M-330R	33	±20%	1k	0.17	0.96	M330
SISCDRH74M-390R	39	±20%	1k	0.23	0.91	M390
SISCDRH74M-470R	47	±20%	1k	0.26	0.88	M470
SISCDRH74M-560R	56	±20%	1k	0.35	0.75	M560
SISCDRH74M-680R	68	±20%	1k	0.38	0.69	M680
SISCDRH74M-820R	82	±20%	1k	0.43	0.61	M820
SISCDRH74M-101R	100	±20%	1k	0.61	0.60	M101
SISCDRH74M-121R	120	±20%	1k	0.66	0.52	M121
SISCDRH74M-151R	150	±20%	1k	0.88	0.46	M151
SISCDRH74M-181R	180	±20%	1k	0.98	0.42	M181
SISCDRH74M-221R	220	±20%	1k	1.17	0.36	M221
SISCDRH74M-271R	270	±20%	1k	1.64	0.34	M271
SISCDRH74M-331R	330	±20%	1k	1.86	0.32	M331
SISCDRH74M-391R	390	±20%	1k	2.85	0.29	M391
SISCDRH74M-471R	470	±20%	1k	3.01	0.26	M471
SISCDRH74M-561R	560	±20%	1k	3.62	0.23	M561
SISCDRH74M-681R	680	±20%	1k	4.63	0.22	M681
SISCDRH74M-821R	820	±20%	1k	5.20	0.20	M821
SISCDRH74M-102R	1000	±20%	1k	6.00	0.18	M102

**Notes:** 1. Ordering Information: SISCDRH74a - bbbRc.

SISCDRH74 = Product Type.

a = Tolerance of Inductance (M = ±20%).

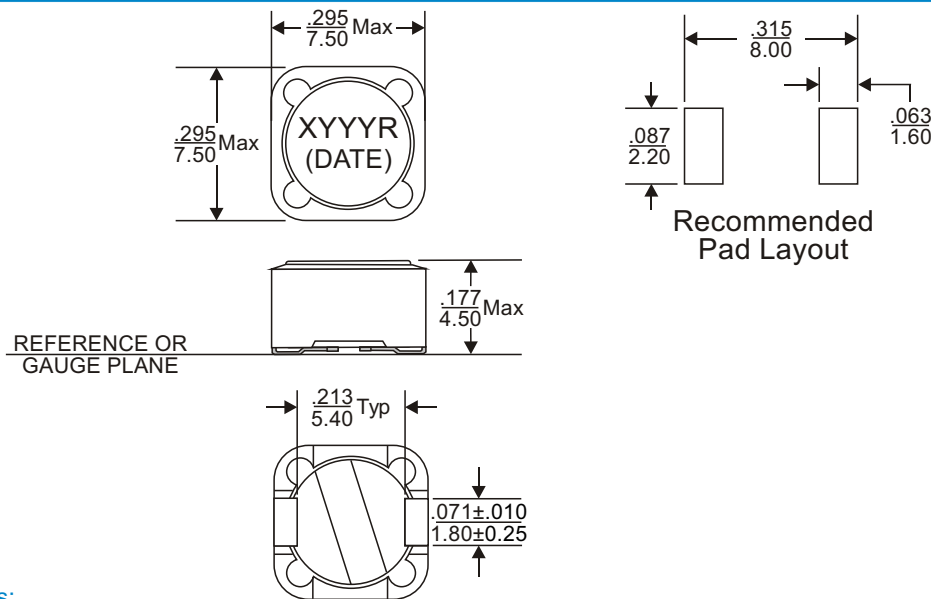
bbb = Inductance value in uH (i.e. 3R3 = 3.3uH; 330 = 33uH; 331 = 330uH; 102 = 1000uH).

R = Internal Control Code.

c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).



**MECHANICAL DIMENSIONS**

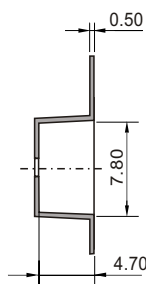
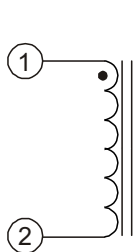


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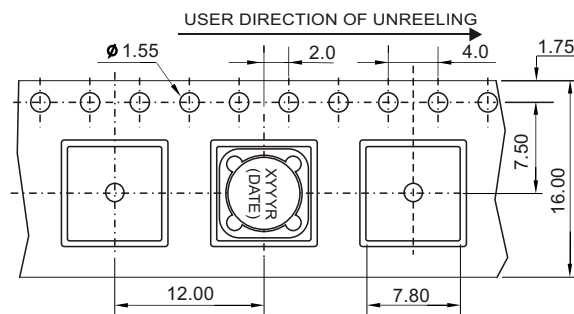
- Test frequency is specified as the frequency for measuring the inductance.
- Rated D.C. current indicates the value of the current when the inductance is 35% lower than its initial value and the temperature rising  $T=40^{\circ}\text{C}$  at D.C. Superposition.
- Operating temperature range:  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$ .
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
- All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
- Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 0.9 typ.
Tape & Reel	: 1000 / reel

**SCHEMATIC**



**PACKAGING**



FOR MORE INFORMATION, PLEASE CONTACT

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-  Magnetically Shielded
-  Miniature in size and high energy storage
-  Ideal for high current requirements of notebook, video recorders and other DC-DC conversion applications
-  Custom inductance value or tolerance is available
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Inductance (uH)	Inductance Tolerance	Test Frequency <sup>2</sup> (Hz)	DCR (m Max)	Rated DC Current <sup>3</sup> (A)	Marking (XXXX)
SISCDRH124M-3R9R	3.9	±20%	100k	15	6.50	M3R9
SISCDRH124M-4R7R	4.7	±20%	100k	18	5.70	M4R7
SISCDRH124M-6R8R	6.8	±20%	100k	23	4.90	M6R8
SISCDRH124M-8R2R	8.2	±20%	100k	26	4.60	M8R2
SISCDRH124M-100R	10	±20%	100k	28	4.50	M100
SISCDRH124M-120R	12	±20%	100k	38	4.00	M120
SISCDRH124M-150R	15	±20%	100k	50	3.20	M150
SISCDRH124M-180R	18	±20%	100k	57	3.10	M180
SISCDRH124M-220R	22	±20%	100k	66	2.90	M220
SISCDRH124M-270R	27	±20%	100k	80	2.80	M270
SISCDRH124M-330R	33	±20%	100k	97	2.70	M330
SISCDRH124M-390R	39	±20%	100k	132	2.10	M390
SISCDRH124M-470R	47	±20%	100k	150	1.90	M470
SISCDRH124M-560R	56	±20%	100k	190	1.80	M560
SISCDRH124M-680R	68	±20%	100k	220	1.50	M680
SISCDRH124M-820R	82	±20%	100k	260	1.30	M820
SISCDRH124M-101R	100	±20%	100k	308	1.20	M101
SISCDRH124M-121R	120	±20%	100k	380	1.10	M121
SISCDRH124M-151R	150	±20%	100k	530	0.95	M151
SISCDRH124M-181R	180	±20%	100k	620	0.85	M181
SISCDRH124M-221R	220	±20%	100k	700	0.80	M221
SISCDRH124M-271R	270	±20%	100k	876	0.60	M271
SISCDRH124M-331R	330	±20%	100k	990	0.50	M331

**Notes:**

1. Ordering Information: SISCDRH124a - bbbRc.

SISCDRH124 = Product Type.

a = Tolerance of Inductance (M = ±20%).

bbb = Inductance value in uH (i.e. 3R9 = 3.9uH; 330 = 33uH; 331 = 330uH).

R = Internal Control Code.

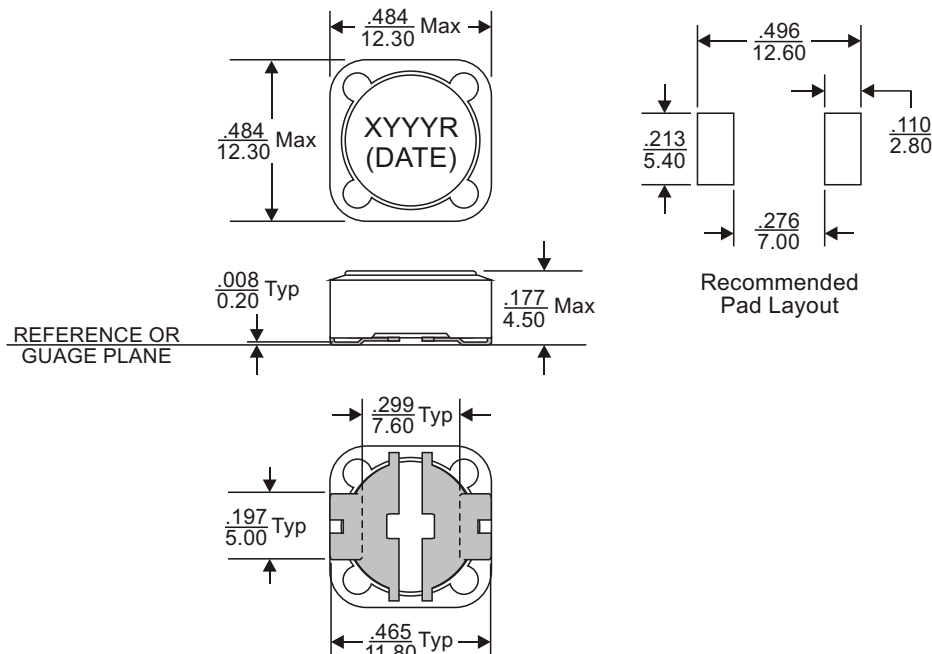
c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).

2. Test frequency is specified as the frequency for measuring the inductance.

3. Rated D.C. current indicates the value of the current when the inductance is 25% lower than its initial value and the temperature rising T=40°C at D.C. Superposition.



**MECHANICAL DIMENSIONS**

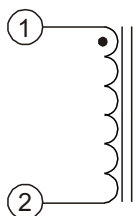


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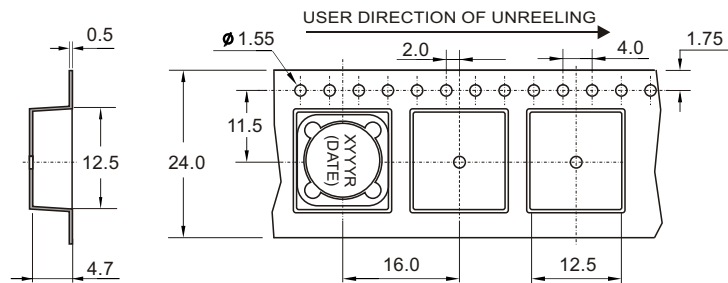
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
- All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
- Unless otherwise specified, all tolerances are  $\pm .010$  /  $\pm 0.25$ .

Weight (in gram)	: 3.5 typ.
Tape & Reel	: 600 / reel

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**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Inductance (uH)	Inductance Tolerance	Test Frequency <sup>2</sup> (Hz)	DCR (m Max)	Rated DC Current <sup>3</sup> (A)	Marking (XXXX)
SISCDRH125N-1R3R	1.3	+30/-20%	1M	12	8.00	N1R3
SISCDRH125N-2R1R	2.1	+30/-20%	1M	14	7.00	N2R1
SISCDRH125N-3R1R	3.1	+30/-20%	1M	17	6.00	N3R1
SISCDRH125N-4R4R	4.4	+30/-20%	1M	20	5.00	N4R4
SISCDRH125N-5R8R	5.8	+30/-20%	1M	21	4.40	N5R8
SISCDRH125N-7R5R	7.5	+30/-20%	1M	24	4.20	N7R5
SISCDRH125N-7R6R	7.6	+30/-20%	1M	26.5	4.50	N7R6
SISCDRH125M-100R	10	20%	1k	25	4.00	M100
SISCDRH125M-120R	12	20%	1k	27	3.50	M120
SISCDRH125M-150R	15	20%	1k	30	3.30	M150
SISCDRH125M-180R	18	20%	1k	34	3.00	M180
SISCDRH125M-220R	22	20%	1k	36	2.80	M220
SISCDRH125M-270R	27	20%	1k	51	2.30	M270
SISCDRH125M-330R	33	20%	1k	57	2.10	M330
SISCDRH125M-390R	39	20%	1k	68	2.00	M390
SISCDRH125M-470R	47	20%	1k	75	1.80	M470
SISCDRH125M-560R	56	20%	1k	110	1.70	M560
SISCDRH125M-680R	68	20%	1k	120	1.50	M680
SISCDRH125M-820R	82	20%	1k	140	1.40	M820
SISCDRH125M-101R	100	20%	1k	160	1.30	M101
SISCDRH125M-121R	120	20%	1k	170	1.10	M121
SISCDRH125M-151R	150	20%	1k	230	1.00	M151
SISCDRH125M-181R	180	20%	1k	290	0.90	M181
SISCDRH125M-221R	220	20%	1k	400	0.80	M221
SISCDRH125M-271R	270	20%	1k	460	0.75	M271
SISCDRH125M-331R	330	20%	1k	510	0.68	M331
SISCDRH125M-391R	390	20%	1k	690	0.65	M391
SISCDRH125M-471R	470	20%	1k	770	0.58	M471
SISCDRH125M-561R	560	20%	1k	860	0.54	M561
SISCDRH125M-681R	680	20%	1k	1200	0.48	M681
SISCDRH125M-821R	820	20%	1k	1340	0.43	M821
SISCDRH125M-102R	1000	20%	1k	1530	0.40	M102

**Notes:** 1. Ordering Information: SISCDRH125a - bbbRc.

SISCDRH125 = Product Type.

a = Tolerance of Inductance (M =  $\pm 20\%$ , N =  $+30\%/-20\%$ ).

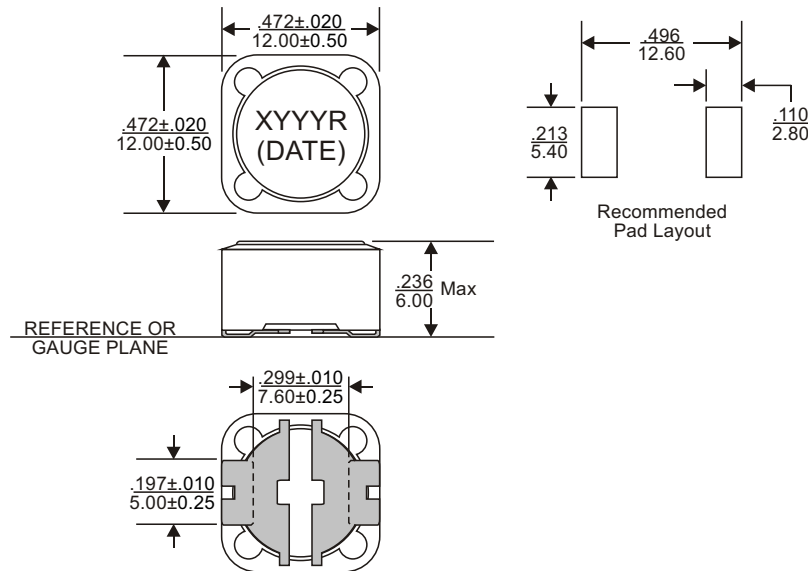
bbb = Inductance value in uH (i.e. 4R4 = 4.4uH; 470 = 47uH; 471 = 470uH; 102 = 1000uH).

R = Internal Control Code.

c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).



**MECHANICAL DIMENSIONS**

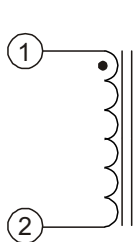


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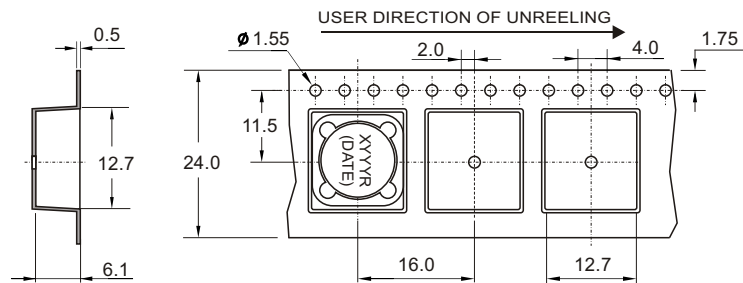
- Test frequency is specified as the frequency for measuring the inductance.
- Rated D.C. current indicates the value of the current when the inductance is 25% lower than its initial value and the temperature rising  $T=40^{\circ}\text{C}$  at D.C. superposition.
- Operating temperature range:  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$ .
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application..
- All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
- Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 3.5 typ.
Tape & Reel	: 600 / reel

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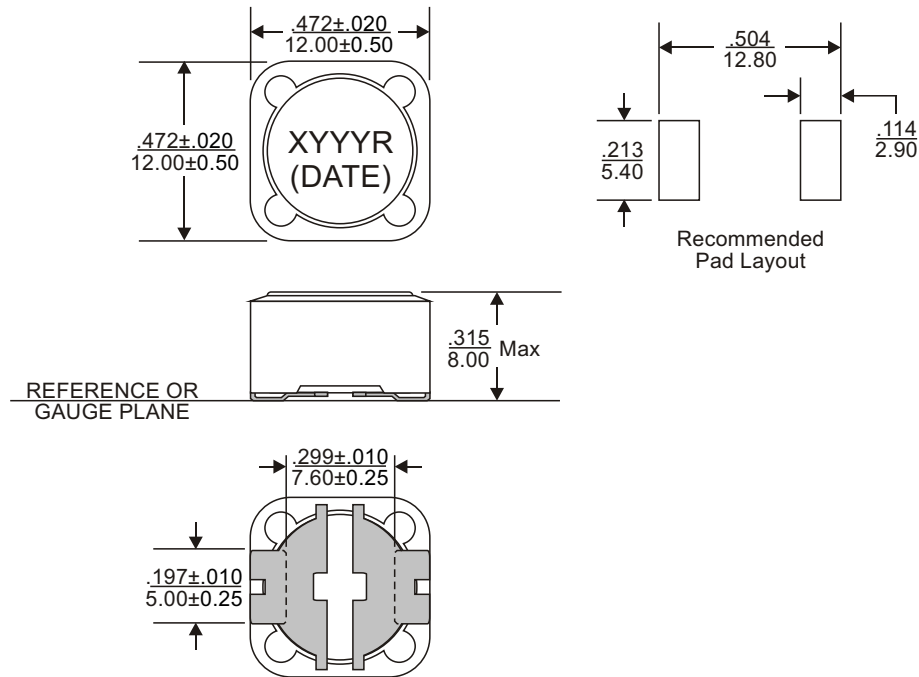
ELECTRICAL SPECIFICATION @ 25°C								
Part Number	Inductance (uH)	Tolerance	DCR (m Max)	Test <sup>2</sup> Frequency (kHz)	Rated <sup>3</sup> DC Current (A)	Isat <sup>4</sup> (A)	Heating Current <sup>5</sup> (A)	Marking (YYYY)
SISCDRH127N-1R2R	1.2	+40/-20%	7.0	100	9.80	14.0	9.80	N1R2
SISCDRH127N-1R5R	1.5	+40/-20%	9.0	100	8.60	12.5	8.60	N1R5
SISCDRH127N-2R4R	2.4	+40/-20%	11.5	100	8.00	11.0	8.00	N2R4
SISCDRH127N-3R5R	3.5	+40/-20%	13.5	100	7.50	9.20	7.50	N3R5
SISCDRH127N-4R7R	4.7	+40/-20%	15.8	100	6.80	8.0	6.80	N4R7
SISCDRH127N-6R1R	6.1	+40/-20%	17.6	100	6.60	7.50	6.60	N6R1
SISCDRH127N-6R8R	6.8	+40/-20%	18.5	100	6.50	7.10	6.50	N6R8
SISCDRH127N-7R6R	7.6	+40/-20%	20.0	100	5.90	6.70	5.90	N7R6
SISCDRH127M-100R	10	20%	21.6	1	5.40	6.40	5.40	M100
SISCDRH127M-120R	12	20%	24.3	1	4.90	5.60	4.90	M120
SISCDRH127M-150R	15	20%	27.0	1	4.50	5.25	4.50	M150
SISCDRH127M-180R	18	20%	39.2	1	3.90	4.70	3.90	M180
SISCDRH127M-220R	22	20%	43.2	1	3.60	4.25	3.60	M220
SISCDRH127M-270R	27	20%	45.9	1	3.40	3.95	3.40	M270
SISCDRH127M-330R	33	20%	64.8	1	3.00	3.50	3.00	M330
SISCDRH127M-390R	39	20%	72.9	1	2.75	3.20	2.75	M390
SISCDRH127M-470R	47	20%	100	1	2.50	3.0	2.50	M470
SISCDRH127M-560R	56	20%	110	1	2.35	2.80	2.35	M560
SISCDRH127M-680R	68	20%	140	1	2.10	2.45	2.10	M680
SISCDRH127M-820R	82	20%	160	1	1.95	2.15	1.95	M820
SISCDRH127M-101R	100	20%	220	1	1.70	1.95	1.70	M101
SISCDRH127M-121R	120	20%	250	1	1.60	1.80	1.60	M121
SISCDRH127M-151R	150	20%	280	1	1.42	1.70	1.42	M151
SISCDRH127M-181R	180	20%	350	1	1.30	1.55	1.30	M181
SISCDRH127M-221R	220	20%	390	1	1.16	1.35	1.16	M221
SISCDRH127M-271R	270	20%	560	1	1.06	1.23	1.06	M271
SISCDRH127M-331R	330	20%	640	1	0.95	1.15	0.95	M331
SISCDRH127M-391R	390	20%	700	1	0.88	1.05	0.88	M391
SISCDRH127M-471R	470	20%	980	1	0.79	0.95	0.79	M471
SISCDRH127M-561R	560	20%	1070	1	0.73	0.80	0.73	M561
SISCDRH127M-681R	680	20%	1460	1	0.67	0.75	0.67	M681
SISCDRH127M-821R	820	20%	1640	1	0.60	0.70	0.60	M821
SISCDRH127M-102R	1000	20%	1820	1	0.55	0.65	0.55	M102

**Notes:**

- Ordering Information: SISCDRH127a - bbbRc.  
SISCDRH127 = Product Type.  
a = Tolerance of Inductance (M =  $\pm 20\%$ , N =  $+40\%/-20\%$ ).  
bbb = Inductance value in uH (i.e. 3R5 = 3.5uH; 330 = 330uH; 331 = 330uH).  
R = Internal Control Code.  
c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).
- Test frequency is specified as the frequency for measuring the inductance.
- Rated DC current is the saturation current or the heating current depending on which value is lower.
- Isat: the saturation current indicates the value of DC current when the inductance is 25% lower than its initial value.
- Heating current: is the value of current when the temperature rising  $T=40^{\circ}\text{C}$  typical..
- Operating temperature range:  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$ .



**MECHANICAL DIMENSIONS**

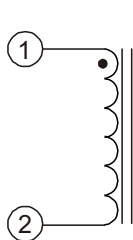


**Notes:**

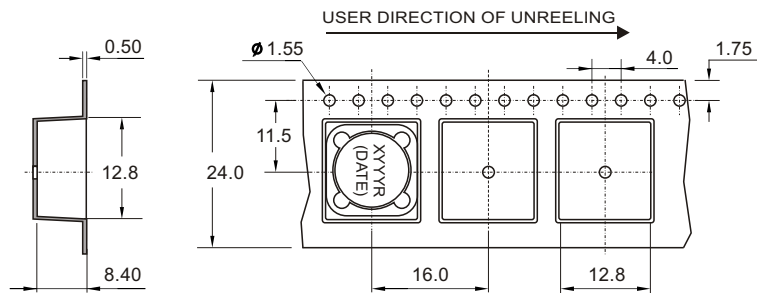
7. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
8. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
9. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 4.0 typ.
Tape & Reel	: 400 / reel

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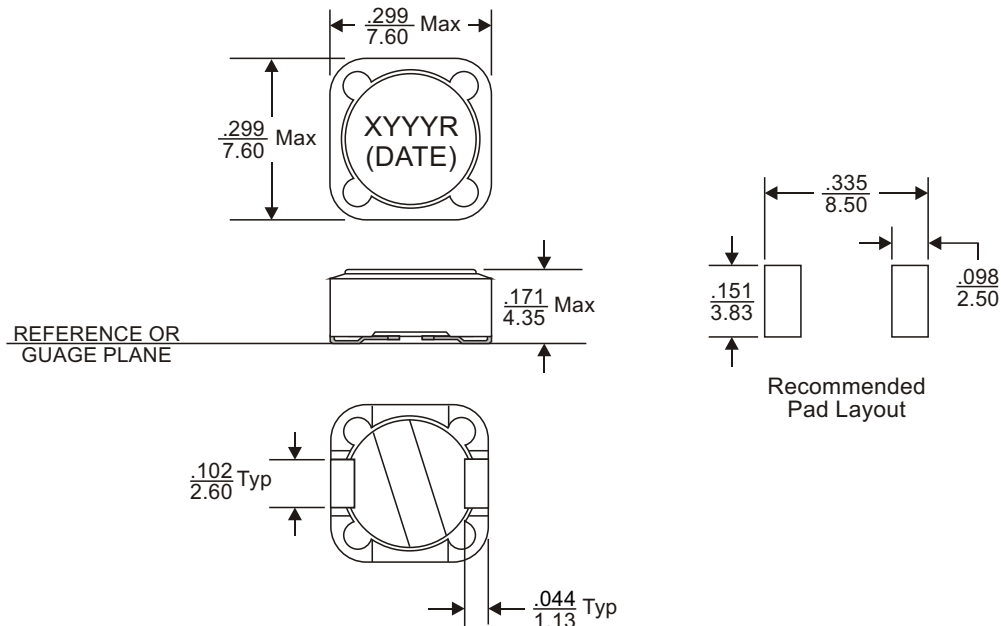
**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Inductance <sup>2</sup> (uH)	Inductance Tolerance	DCR (m Typ)	Isat <sup>3</sup> (A)	Irms <sup>4</sup> (A)	Volt- Sec Typ.	Marking (YYYY)
SISDR74M-R33R	0.294	±20%	7.4	18.4	6.26	1.71	MR33
SISDR74M-1R0R	0.952	±20%	9.9	10.2	5.39	3.08	M1R0
SISDR74M-1R5R	1.422	±20%	11.8	8.35	4.94	3.76	M1R5
SISDR74M-2R2R	1.986	±20%	12.6	7.06	4.76	4.45	M2R2
SISDR74M-3R3R	3.396	±20%	18.3	5.40	3.94	5.81	M3R3
SISDR74M-4R7R	5.182	±20%	25.4	4.37	3.34	7.18	M4R7
SISDR74M-6R8R	7.344	±20%	41.8	3.67	2.60	8.55	M6R8
SISDR74M-8R2R	8.566	±20%	44.1	3.40	2.53	9.23	M8R2
SISDR74M-100R	9.882	±20%	48.9	3.17	2.41	9.92	M100
SISDR74M-150R	16.09	±20%	63.7	2.48	2.11	12.7	M150
SISDR74M-220R	21.73	±20%	92.5	2.13	1.75	14.7	M220
SISDR74M-330R	33.01	±20%	143	1.73	1.41	18.1	M330
SISDR74M-470R	49.64	±20%	216	1.41	1.15	22.2	M470
SISDR74M-680R	69.67	±20%	265	1.19	1.03	26.3	M680
SISDR74M-820R	80.95	±20%	345	1.11	0.91	28.4	M820
SISDR74M-101R	101.6	±20%	383	0.99	0.86	31.8	M101
SISDR74M-151R	150.0	±20%	591	0.81	0.69	38.6	M151
SISDR74M-221R	227.0	±20%	907	0.66	0.56	47.5	M221
SISDR74M-331R	335.6	±20%	1410	0.54	0.45	57.8	M331
SISDR74M-471R	465.3	±20%	1740	0.46	0.40	68.1	M471
SISDR74M-681R	671.2	±20%	2580	0.38	0.33	81.7	M681
SISDR74M-821R	812.7	±20%	2930	0.35	0.31	89.9	M821
SISDR74M-102R	1009	±20%	3890	0.31	0.27	100	M102

**Notes:**

- Ordering Information: SISDR74a - bbbRc.  
SISDR74 = Product Type.  
a = Tolerance of Inductance (M = ±20%).  
bbb = Inductance value in uH (i.e. 4R7 = 4.7uH; 470 = 47uH; 471 = 470uH; 102 = 1000uH).  
R = Internal Control Code.  
c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).
- Inductance is tested at 0.25Vrms, 100kHz.
- Saturation current, Isat, indicates the value of DC current when the inductance is 30% typical lower than its initial value.

## MECHANICAL DIMENSIONS



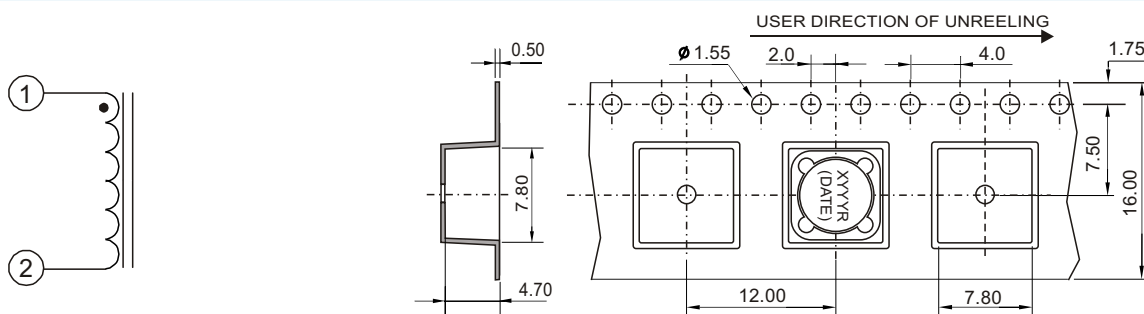
Notes:

4. Heating current, Irms, is the value of current when the temperature rising T=40°C typical.
  5. Operating temperature range: -40°C to +125°C.
  6. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
  7. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
  8. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{.025}$ .
- Weight (in gram) :

Weight (in gram)	:	3.0 typ.
Tape & Reel	:	1000 / reel

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-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Inductance <sup>2</sup> (uH)	Inductance Tolerance	DCR (m Typ)	Isat <sup>3</sup> (A)	Irms <sup>4</sup> (A)	Volt- Sec Typ.	Marking (YYYY)
SISDR125M-R47F	0.456	±20%	1.7	33.0	18.4	3.17	MR47
SISDR125M-1R0F	0.894	±20%	2.3	23.6	15.5	4.43	M1R0
SISDR125M-1R5F	1.478	±20%	2.7	18.3	14.1	5.70	M1R5
SISDR125M-2R2F	2.208	±20%	4.4	15.0	11.1	6.97	M2R2
SISDR125M-3R3F	3.084	±20%	6.3	12.7	9.26	8.23	M3R3
SISDR125M-4R7F	5.274	±20%	10.5	9.71	7.18	10.8	M4R7
SISDR125M-6R8F	6.588	±20%	12.3	8.68	6.64	12.0	M6R8
SISDR125M-8R2F	8.048	±20%	17.6	7.86	5.54	13.3	M8R2
SISDR125M-100F	9.654	±20%	18.9	7.17	5.35	14.6	M100
SISDR125M-150F	15.35	±20%	29.8	5.69	4.27	18.4	M150
SISDR125M-220F	22.36	±20%	39.6	4.71	3.70	22.2	M220
SISDR125M-330F	33.74	±20%	50.5	3.84	3.28	27.2	M330
SISDR125M-470F	47.47	±20%	74.0	3.24	2.71	32.3	M470
SISDR125M-680F	67.91	±20%	101	2.70	2.22	38.6	M680
SISDR125M-820F	86.89	±20%	128	2.39	2.05	43.7	M820
SISDR125M-101F	102.7	±20%	170	2.20	1.78	47.5	M101
SISDR125M-151F	151.1	±20%	248	1.81	1.48	57.6	M151
SISDR125M-221F	216.8	±20%	384	1.51	1.19	69.0	M221
SISDR125M-331F	332.6	±20%	482	1.22	1.06	85.5	M331
SISDR125M-471F	473.1	±20%	718	1.02	0.87	102	M471
SISDR125M-681F	679.8	±20%	1100	0.85	0.70	122	M681
SISDR125M-821F	828.0	±20%	1490	0.77	0.60	135	M821
SISDR125M-102F	1008	±20%	1690	0.70	0.57	149	M102

**Notes:**

1. Ordering Information: SISDR125Ra - bbbFc.

SISDR125R = Product Type.

a = Tolerance of Inductance (M = ±20%).

bbb = Inductance value in uH (i.e. R47 = 0.47uH; 1R5 = 1.5uH; 150 = 15uH; 151 = 150uH; 102 = 1000uH).

F = Internal Control Code.

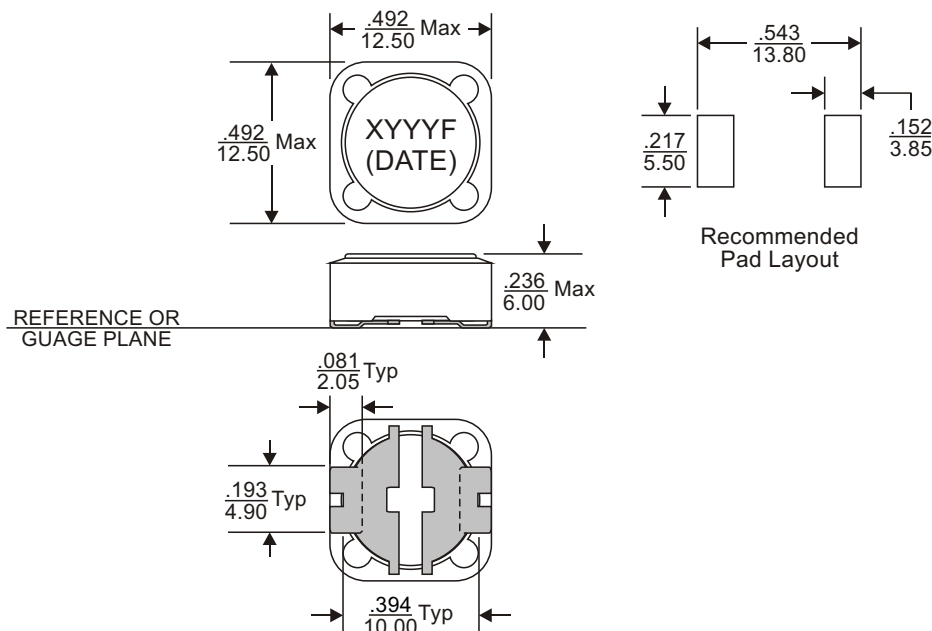
c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).

2. Inductance is tested at 0.25Vrms, 100kHz.

3. Saturation current, Isat, indicates the value of DC current when the inductance is 30% typical lower than its initial value.



**MECHANICAL DIMENSIONS**

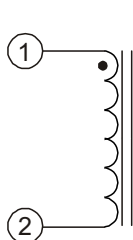


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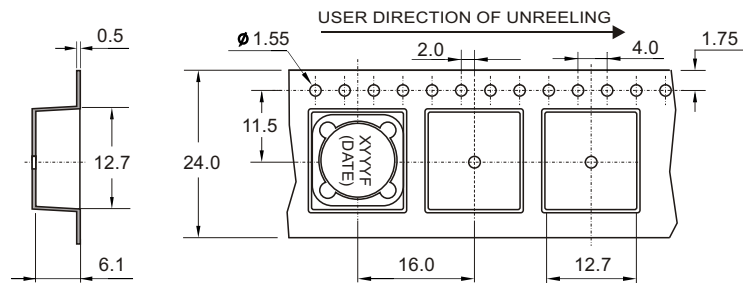
4. Heating current,  $I_{rms}$ , is the value of current when the temperature rising  $T=40^{\circ}\text{C}$  typical.
5. Operating temperature range:  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$ .
6. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
7. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
8. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 3.5 typ.
Tape & Reel	: 600 / reel

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**FOR MORE INFORMATION, PLEASE CONTACT**

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-  Magnetically Shielded
-  Miniature in size and high energy storage
-  Ideal for high current requirements of notebook, video recorders and other DC-DC conversion applications
-  Custom inductance value or tolerance is available
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Inductance <sup>2</sup> (uH)	Inductance Tolerance	DCR (m Typ)	Isat <sup>3</sup> (A)	Irms <sup>4</sup> (A)	Volt- Sec Typ.	Marking (YYYY)
SISDR127M-R47R	0.419	±20%	1.81	56.0	18.6	3.50	MR47
SISDR127M-1R0R	0.821	±20%	2.47	40.0	15.9	4.90	M1R0
SISDR127M-1R5R	1.357	±20%	3.27	31.1	13.8	6.30	M1R5
SISDR127M-2R2R	2.027	±20%	3.88	25.5	12.7	7.70	M2R2
SISDR127M-3R3R	2.831	±20%	5.67	21.5	10.5	9.10	M3R3
SISDR127M-4R7R	4.841	±20%	9.17	16.5	8.25	11.9	M4R7
SISDR127M-6R8R	7.387	±20%	11.6	13.3	7.34	14.7	M6R8
SISDR127M-8R2R	8.861	±20%	15.7	12.2	6.32	16.1	M8R2
SISDR127M-100R	10.47	±20%	17.2	11.2	6.04	17.5	M100
SISDR127M-150R	14.09	±20%	24.7	9.66	5.03	20.3	M150
SISDR127M-220R	22.93	±20%	39.1	7.57	4.00	25.9	M220
SISDR127M-330R	33.92	±20%	60.0	6.22	3.23	31.5	M330
SISDR127M-470R	47.05	±20%	71.9	5.28	2.95	37.1	M470
SISDR127M-680R	66.48	±20%	105	4.44	2.44	44.1	M680
SISDR127M-820R	79.75	±20%	143	4.06	2.09	48.3	M820
SISDR127M-101R	99.31	±20%	163	3.64	1.96	53.9	M101
SISDR127M-151R	144.9	±20%	247	3.01	1.59	65.1	M151
SISDR127M-221R	221.5	±20%	376	2.43	1.29	80.5	M221
SISDR127M-331R	323.6	±20%	574	2.01	1.04	97.3	M331
SISDR127M-471R	467.1	±20%	861	1.68	0.85	117	M471
SISDR127M-681R	676.7	±20%	1080	1.39	0.76	141	M681
SISDR127M-821R	818.1	±20%	1470	1.27	0.65	155	M821
SISDR127M-102R	1005	±20%	1660	1.14	0.61	172	M102
SISDR127K-222R	2200	±10%	4200	0.42	0.40	254.1	K222

**Notes:**

1. Ordering Information: SISDR127a - bbbRc.

SISDR127 = Product Type.

a = Tolerance of Inductance (M = ±20%, K = ±10%).

bbb = Inductance value in uH (i.e. R47 = 0.47uH; 4R7 = 4.7uH; 470 = 47uH; 471 = 470uH; 102 = 1000uH).

R = Internal Control Code.

c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).

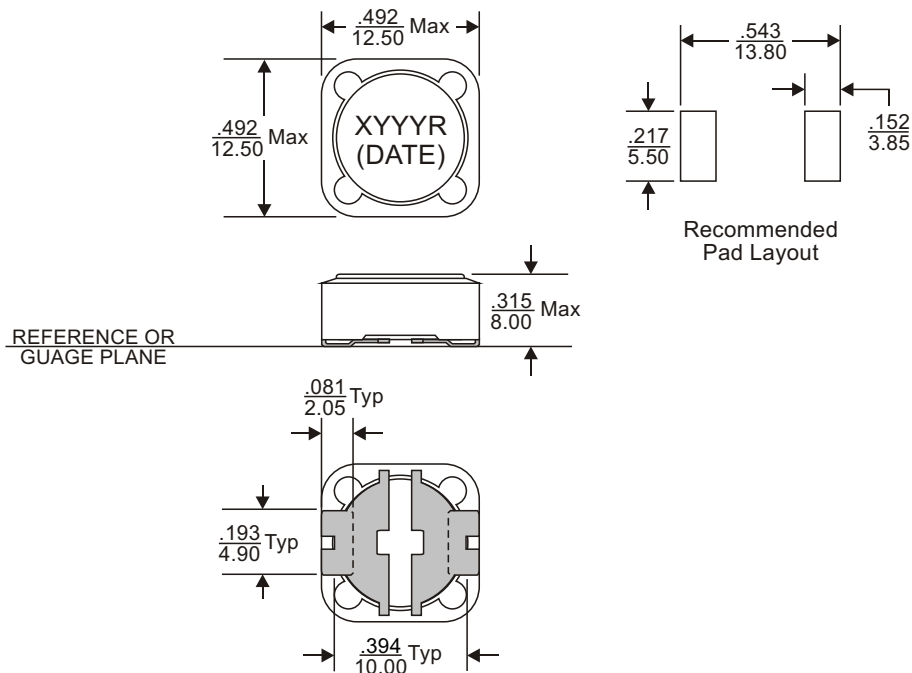
2. Inductance is tested at 0.25Vrms, 100kHz.

3. Saturation current, Isat, indicates the value of DC current when the inductance is 30% typical lower than its initial value.

4. Heating current, Irms, is the value of current when the temperature rising T=40°C typical.



**MECHANICAL DIMENSIONS**

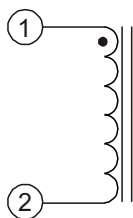


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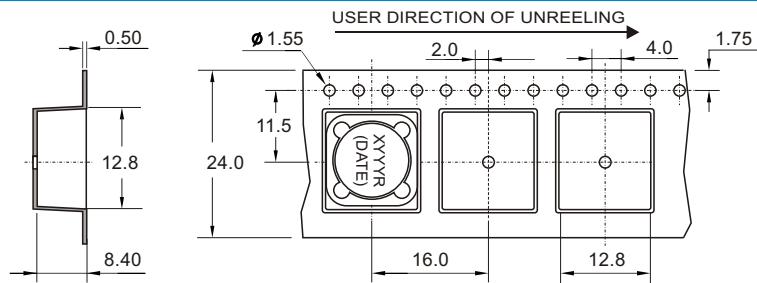
- Operating temperature range: -40°C to +125°C.
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
- All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
- Unless otherwise specified, all tolerances are  $\pm \frac{.010}{.25}$ .

Weight (in gram)	: 4.0 typ.
Tape & Reel	: 400 / reel

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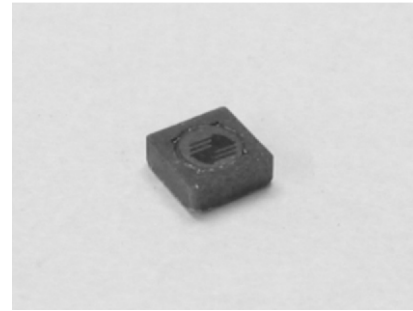
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-  Custom inductance value or tolerance is available
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**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Rated <sup>5</sup> Inductance (uH) Typ	Inductance <sup>2</sup> (uH $\pm 20\%$ )	Test Frequency (kHz)	I <sub>rms</sub> <sup>4</sup> (A)	I <sub>sat</sub> <sup>3</sup> (A)	DCR ( Typ)	Volt- Sec <sup>5</sup> Typ.	Marking YYYY
SISSD12M-R47F	0.47	0.49	100	3.19	3.86	24.6m	1.67	Mr47
SISSD12M-1R2F	1.20	1.21	100	2.62	2.45	36.6m	2.62	M1R2
SISSD12M-1R5F	1.50	1.69	100	2.19	2.08	52.1m	3.09	M1R5
SISSD12M-2R2F	2.20	2.25	100	1.83	1.80	74.7m	3.57	M2R2
SISSD12M-3R3F	3.30	3.61	100	1.55	1.42	104.3m	4.52	M3R3
SISSD12M-4R7F	4.70	4.41	100	1.46	1.29	117.7m	5.00	M4R7
SISSD12M-6R2F	6.20	6.25	100	1.21	1.08	169.9m	5.95	M6R2
SISSD12M-8R2F	8.20	8.41	100	1.021	0.931	239.9m	6.90	M8R2
SISSD12M-100F	10.0	10.89	100	0.938	0.818	284.4m	7.85	M100
SISSD12M-150F	15.0	15.21	100	0.782	0.692	408.9m	9.28	M150
SISSD12M-220F	22.0	22.09	100	0.628	0.574	633.8m	11.19	M220
SISSD12M-330F	33.0	32.49	100	0.519	0.474	928.9m	13.57	M330
SISSD12M-470F	47.0	47.61	100	0.428	0.391	1.37	16.42	M470
SISSD12M-680F	68.0	68.89	100	0.341	0.325	2.16	19.75	M680
SISSD12M-820F	82.0	82.81	100	0.326	0.297	2.36	21.66	M820
SISSD12M-101F	100	98.00	100	0.308	0.273	2.64	23.56	M101
SISSD12M-151F	150	151.3	100	0.251	0.220	3.96	29.27	M151
SISSD12M-221F	220	222.0	100	0.229	0.181	4.76	35.46	M221
SISSD12M-331F	330	334.9	100	0.186	0.148	7.25	43.55	M331
SISSD12M-471F	470	462.3	100	0.167	0.126	8.95	51.17	M471
SISSD12M-681F	680	670.8	100	0.149	0.104	11.30	61.64	M681
SISSD12M-821F	820	800.9	100	0.129	0.095	14.93	67.35	M821
SISSD12M-102F	1000	992.3	100	0.121	0.086	17.20	74.97	M102

**Notes:**

1. Ordering Information: SISSD12a - bbbFc.

SISSD12 = Product Type.

a = Tolerance of Inductance (M =  $\pm 20\%$ ).

bbb = Inductance value in uH (i.e. R47=0.47uH; 4R7 = 4.7uH; 470 = 47uH; 471 = 470uH; 102 = 1000uH).

F = Internal Control Code.

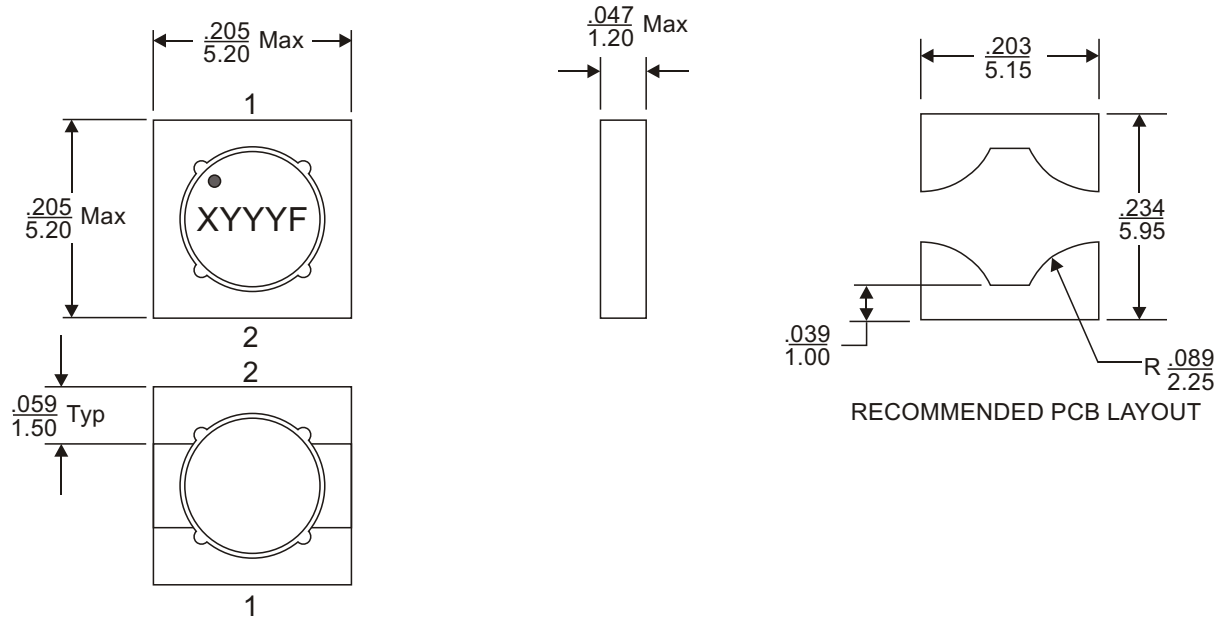
c = Packaging Code (U = Tape & Reel Packaging in 7 inch Reel).

2. Inductance is tested at 0.25Vrms, 100kHz.

3. Saturation current, I<sub>sat</sub>, indicates the value of DC current when the inductance is 30% typical lower than its initial value.



MECHANICAL DIMENSIONS

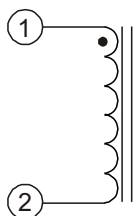


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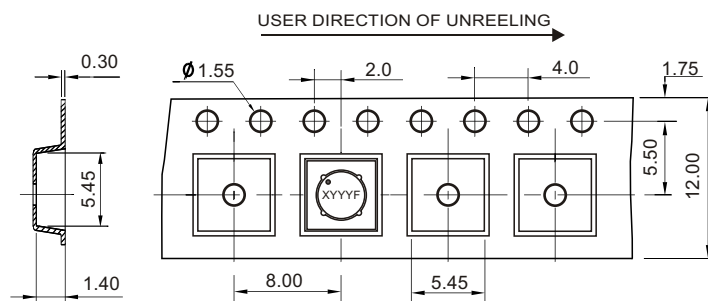
4. Heating current,  $I_{rms}$ , is the value of current when the temperature rising  $T=40^{\circ}\text{C}$  typical.
5. Rated inductance and volt-uSec are for reference only.
6. Operating temperature range:  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$ .
7. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
8. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
9. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{.025}$ .

Weight (in gram)	: 1.2 typ.
Tape & Reel	: 1000 / reel

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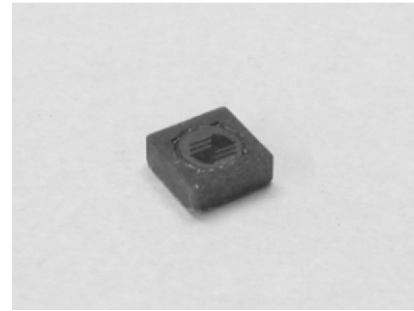
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-  Custom inductance value or tolerance is available
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**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Rated <sup>5</sup> Inductance (uH) Typ	Inductance (uH ±20%)	Test Frequency <sup>2</sup> (kHz)	I <sub>rms</sub> <sup>4</sup> (A)	I <sub>sat</sub> <sup>3</sup> (A)	DCR ( Typ)	Volt- Sec <sup>5</sup> Typ.	Marking (YYYY)
SISSD18M-R47F	0.47	0.49	100	3.58	4.63	20.1m	1.62	MR47
SISSD18M-R82F	0.82	0.81	100	3.24	3.60	24.7m	2.09	MR82
SISSD18M-1R2F	1.20	1.21	100	2.97	2.95	29.4m	2.55	M1R2
SISSD18M-1R5F	1.50	1.69	100	2.73	2.49	34.5m	3.02	M1R5
SISSD18M-2R2F	2.20	2.25	100	2.55	2.16	39.8m	3.48	M2R2
SISSD18M-3R3F	3.30	3.61	100	2.07	1.71	60.5m	4.41	M3R3
SISSD18M-4R7F	4.70	4.41	100	1.77	1.54	82.4m	4.87	M4R7
SISSD18M-6R2F	6.20	6.25	100	1.61	1.30	100m	5.80	M6R2
SISSD18M-8R2F	8.20	8.41	100	1.38	1.12	135.1m	6.73	M8R2
SISSD18M-100F	10.0	10.89	100	1.28	0.982	158.4m	7.66	M100
SISSD18M-150F	15.0	15.21	100	1.06	0.831	227.8m	9.05	M150
SISSD18M-220F	22.0	22.09	100	0.876	0.689	336.6m	10.90	M220
SISSD18M-330F	33.0	32.49	100	0.715	0.568	505.7m	13.22	M330
SISSD18M-470F	47.0	47.61	100	0.578	0.470	773.2m	16.01	M470
SISSD18M-680F	68.0	68.89	100	0.514	0.390	979.8m	19.26	M680
SISSD18M-820F	82.0	82.81	100	0.446	0.356	1.30	21.11	M820
SISSD18M-101F	100	102.01	100	0.419	0.321	1.47	23.43	M101
SISSD18M-151F	150	151.29	100	0.345	0.263	2.18	28.54	M151
SISSD18M-221F	220	222.01	100	0.296	0.217	2.95	34.57	M221
SISSD18M-331F	330	334.89	100	0.248	0.177	4.20	42.46	M331
SISSD18M-471F	470	479.61	100	0.201	0.148	6.39	50.81	M471
SISSD18M-681F	680	681.21	100	0.167	0.124	9.28	60.55	M681
SISSD18M-821F	820	823.69	100	0.145	0.113	12.35	66.58	M821
SISSD18M-102F	1000	1004	100	0.136	0.102	14.01	73.54	M102

**Notes:**

1. Ordering Information: SISSD18a - bbbFc.

SISSD18 = Product Type.

a = Tolerance of Inductance (M = ±20%).

bbb = Inductance value in uH (i.e. R47=0.47uH; 4R7 = 4.7uH; 470 = 47uH; 471 = 470uH; 102 = 1000uH).

F = Internal Control Code.

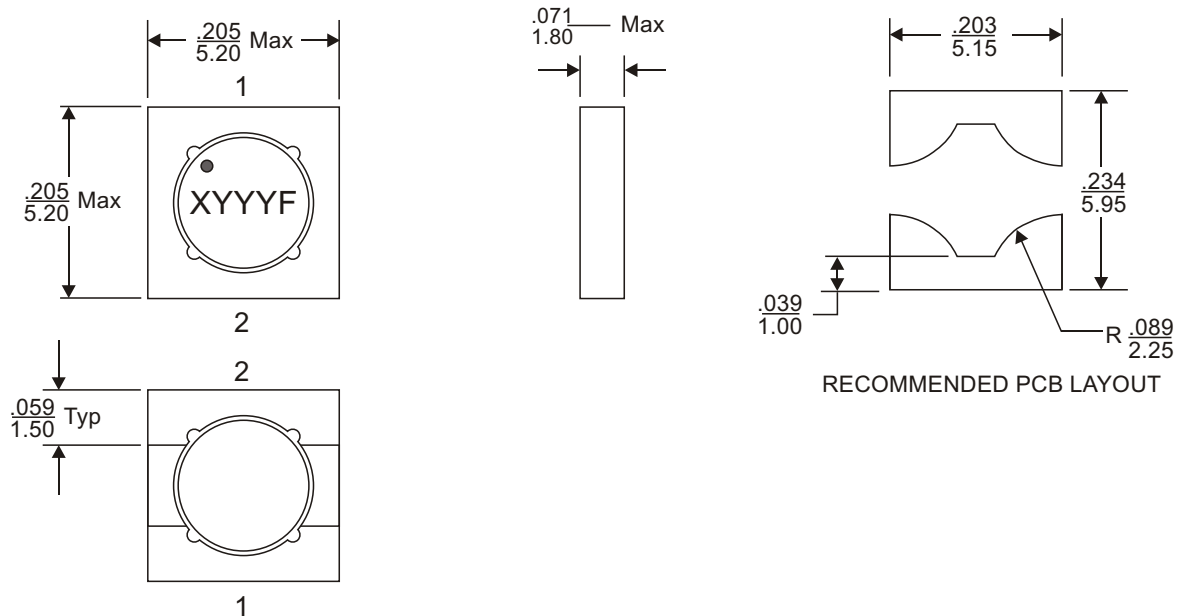
c = Packaging Code (U = Tape & Reel Packaging in 7 inch Reel).

2. Inductance is tested at 0.25V<sub>rms</sub>, 100kHz.

3. Saturation current, I<sub>sat</sub>, indicates the value of DC current when the inductance is 30% typical lower than its initial value.



MECHANICAL DIMENSIONS

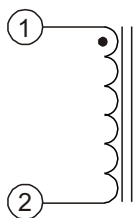


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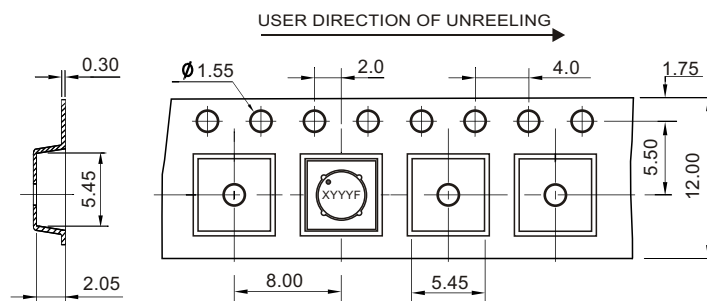
4. Heating current,  $I_{rms}$ , is the value of current when the temperature rising  $T=40^{\circ}\text{C}$  typical.
5. Rated inductance and volt-uSec are for reference only.
6. Operating temperature range:  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$ .
7. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
8. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
9. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 1.5 typ.
Tape & Reel	: 1000 / reel

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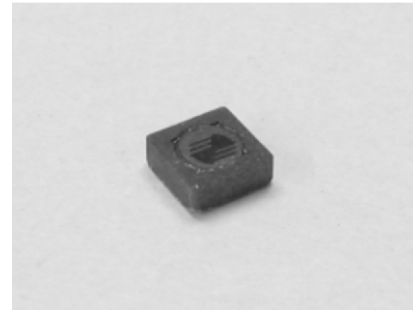
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-  Magnetically Shielded
-  Miniature in size and high energy storage
-  Ideal for high current requirements of notebook, video recorders and other DC-DC conversion applications
-  Custom inductance value or tolerance is available
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Rated <sup>5</sup> Inductance (uH) Typ	Inductance (uH $\pm 20\%$ )	Test Frequency <sup>2</sup> (kHz)	I <sub>rms</sub> <sup>4</sup> (A)	I <sub>sat</sub> <sup>3</sup> (A)	DCR ( Typ)	Volt- Sec <sup>5</sup> Typ.	Marking (YYYY)
SISSD20M-R47F	0.47	0.49	100	3.59	4.00	20m	1.46	MR47
SISSD20M-1R2F	1.20	1.21	100	3.07	2.55	27.5m	2.29	M1R2
SISSD20M-1R5F	1.50	1.69	100	2.88	2.15	31.2m	2.70	M1R5
SISSD20M-2R2F	2.20	2.25	100	2.45	1.87	42.9m	3.12	M2R2
SISSD20M-3R3F	3.30	3.61	100	2.17	1.47	54.7m	3.95	M3R3
SISSD20M-4R7F	4.70	4.41	100	2.05	1.33	61.2m	4.37	M4R7
SISSD20M-6R2F	6.20	6.25	100	1.89	1.12	72m	5.20	M6R2
SISSD20M-8R2F	8.20	8.41	100	1.61	0.966	100m	6.03	M8R2
SISSD20M-100F	10.0	9.61	100	1.53	0.903	110m	6.45	M100
SISSD20M-150F	15.0	15.21	100	1.25	0.718	165.5m	8.11	M150
SISSD20M-220F	22.0	22.09	100	1.12	0.596	205.3m	9.78	M220
SISSD20M-330F	33.0	32.49	100	0.913	0.491	310m	11.86	M330
SISSD20M-470F	47.0	47.61	100	0.745	0.406	465m	14.35	M470
SISSD20M-680F	68.0	68.89	100	0.610	0.337	694.7m	17.26	M680
SISSD20M-820F	82.0	82.81	100	0.576	0.308	778.5m	18.93	M820
SISSD20M-101F	100	98.01	100	0.495	0.283	1.06	20.59	M101
SISSD20M-151F	150	151.3	100	0.435	0.228	1.37	25.58	M151
SISSD20M-221F	220	222.0	100	0.356	0.188	2.04	30.99	M221
SISSD20M-331F	330	327.6	100	0.294	0.155	2.99	37.65	M331
SISSD20M-471F	470	470.9	100	0.263	0.129	3.74	45.14	M471
SISSD20M-681F	680	681.2	100	0.216	0.107	5.56	54.29	M681
SISSD20M-821F	820	823.7	100	0.204	0.098	6.22	59.70	M821
SISSD20M-102F	1000	1004.9	100	0.172	0.088	8.73	65.94	M102

**Notes:**

1. Ordering Information: SISSD20a - bbbFc.

SISSD20 = Product Type.

a = Tolerance of Inductance (M =  $\pm 20\%$ ).

bbb = Inductance value in uH (i.e. R47=0.47uH; 4R7 = 4.7uH; 470 = 47uH; 471 = 470uH; 102 = 1000uH).

F = Internal Control Code.

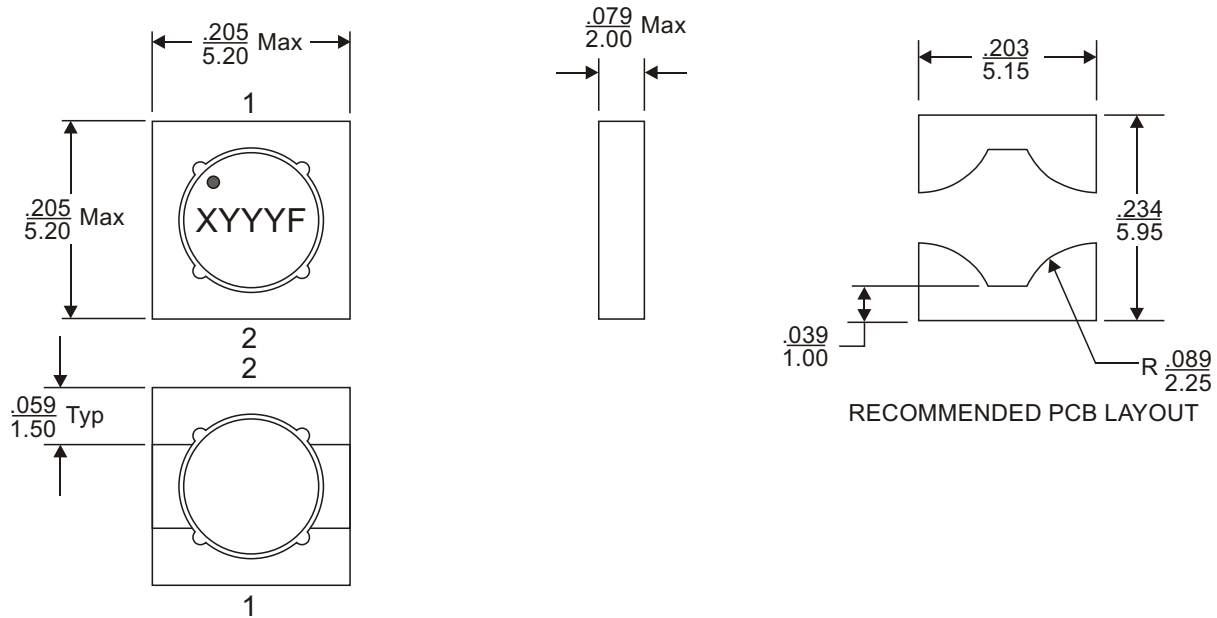
c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).

2. Inductance is tested at 0.25Vrms, 100kHz.

3. Saturation current, I<sub>sat</sub>, indicates the value of DC current when the inductance is 30% typical lower than its initial value.



MECHANICAL DIMENSIONS

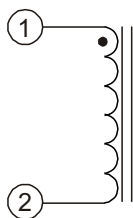


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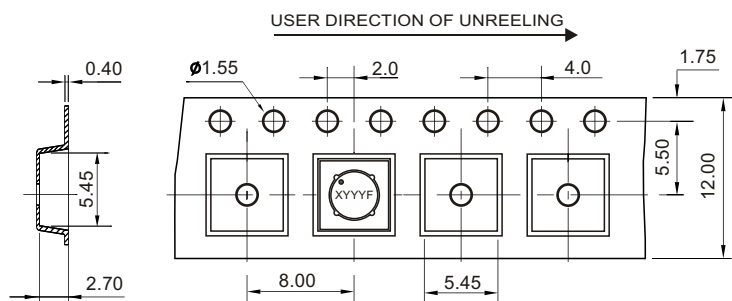
4. Heating current, Irms, is the value of current when the temperature rising  $T=40^{\circ}\text{C}$  typical.
5. Rated inductance and volt-uSec are for reference only.
6. Operating temperature range:  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$ .
7. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
8. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
9. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 1.8 typ.
Tape & Reel	: 2900 / reel

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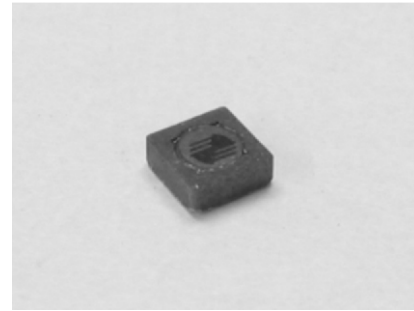
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-  Miniature in size and high energy storage
-  Ideal for high current requirements of notebook, video recorders and other DC-DC conversion applications
-  Custom inductance value or tolerance is available
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Rated <sup>5</sup> Inductance (uH) Typ	Inductance (uH ±20%)	Test Frequency <sup>2</sup> (kHz)	I <sub>rms</sub> <sup>4</sup> (A)	I <sub>sat</sub> <sup>3</sup> (A)	DCR ( Typ)	Volt- Sec <sup>5</sup> Typ.	Marking (YYYY)
SISSD25M-R47F	0.47	0.466	100	3.88	6.00	17.7m	1.46	MR47
SISSD25M-R82F	0.82	0.77	100	3.58	4.67	20.8m	1.87	MR82
SISSD25M-1R2F	1.20	1.15	100	3.33	3.81	24.0m	2.29	M1R2
SISSD25M-1R5F	1.50	1.61	100	3.12	3.23	27.4m	2.70	M1R5
SISSD25M-2R2F	2.20	2.14	100	2.93	2.80	31.1m	3.12	M2R2
SISSD25M-3R3F	3.30	3.43	100	2.64	2.21	38.4m	3.95	M3R3
SISSD25M-4R7F	4.70	5.03	100	2.39	1.83	46.7m	4.78	M4R7
SISSD25M-6R8F	6.80	6.93	100	2.19	1.56	55.6m	5.62	M6R8
SISSD25M-8R2F	8.20	7.99	100	1.92	1.45	72.4m	6.03	M8R2
SISSD25M-100F	10.0	10.35	100	1.80	1.27	82.4m	6.86	M100
SISSD25M-150F	15.0	14.45	100	1.67	1.08	95.6m	8.11	M150
SISSD25M-220F	22.0	22.81	100	1.34	0.857	147.8m	10.19	M220
SISSD25M-330F	33.0	33.07	100	1.11	0.711	214.9m	12.27	M330
SISSD25M-470F	47.0	47.89	100	0.919	0.592	315.6m	14.77	M470
SISSD25M-680F	68.0	68.64	100	0.741	0.482	485.0m	17.68	M680
SISSD25M-820F	82.0	82.17	100	0.713	0.441	524.2m	19.34	M820
SISSD25M-101F	100	100.79	100	0.670	0.398	593.7m	21.42	M101
SISSD25M-151F	150	148.4	100	0.553	0.328	872.3m	26.00	M151
SISSD25M-221F	220	222.4	100	0.446	0.268	1.34	31.82	M221
SISSD25M-331F	330	332.2	100	0.359	0.219	2.07	38.90	M331
SISSD25M-471F	470	472.4	100	0.293	0.184	3.10	46.38	M471
SISSD25M-681F	680	677.2	100	0.262	0.154	3.88	55.54	M681
SISSD25M-821F	820	826.7	100	0.230	0.139	5.04	61.36	M821
SISSD25M-102F	1000	1003.4	100	0.216	0.126	5.70	67.60	M102

**Notes:**

1. Ordering Information: SISSD25a - bbbFc.

SISSD25 = Product Type.

a = Tolerance of Inductance (M = ±20%).

bbb = Inductance value in uH (i.e. R47=0.47uH; 4R7 = 4.7uH; 470 = 47uH; 471 = 470uH; 102 = 1000uH).

F = Internal Control Code.

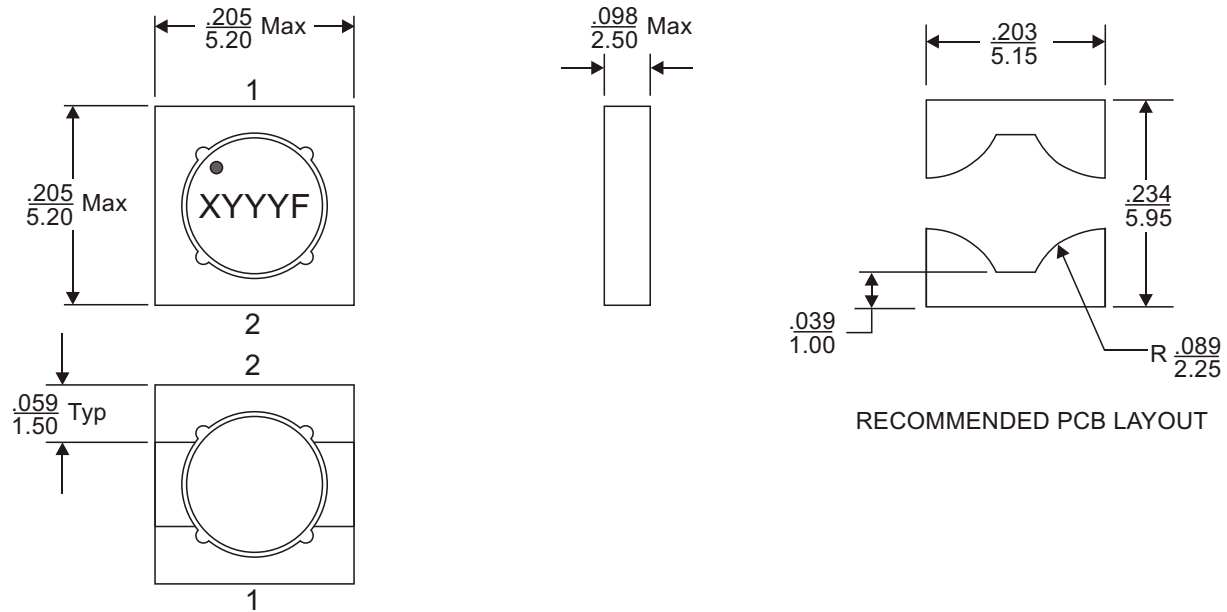
c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).

2. Inductance is tested at 0.25V<sub>rms</sub>, 100kHz.

3. Saturation current, I<sub>sat</sub>, indicates the value of DC current when the inductance is 30% typical lower than its initial value.



MECHANICAL DIMENSIONS

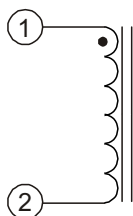


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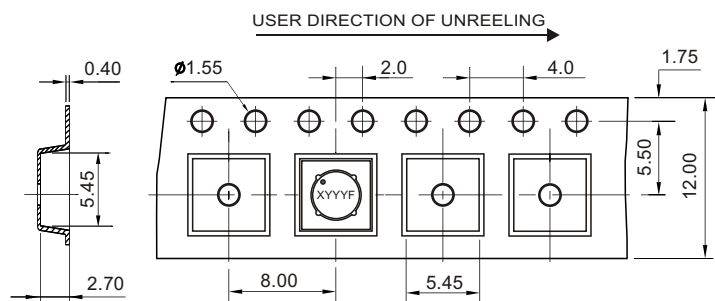
4. Heating current, Irms, is the value of current when the temperature rising  $T=40^{\circ}\text{C}$  typical.
5. Rated inductance and volt-uSec are for reference only.
6. Operating temperature range:  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$ .
7. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
8. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
9. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 2.0 typ.
Tape & Reel	: 2900 / reel

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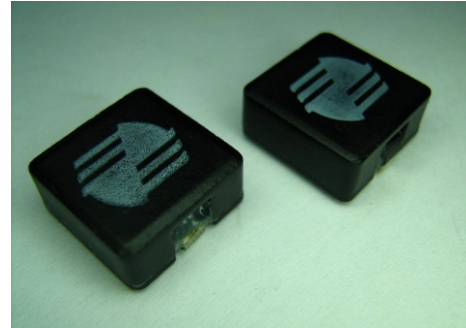
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-  Used in higher speed switch mode
-  Large permissible DC current and low voltage
-  Ideal for computers and portable power devices, DC-DC converters, energy storage applications and Input-Output filter applications
-  Operating temperature -40 C to +125 C
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Rated Inductance (uH Typ)	Inductance @0Adc <sup>2</sup>		Heating <sup>3</sup> Current Irms(A)	Isat <sup>4</sup> 15% rolloff (A)	Isat <sup>5</sup> 30% rolloff (A)	DCR (m $\Omega$ ) Max	Volts $\mu$ Sec (V $\mu$ S) Typ	Marking (XXXYF)
		(uH)	Tolerances (%)						
RIS1040A-R15MF	0.15	0.175	±20	39.0	43	76	0.80	1.5	R15MF
RIS1040A-R39MF	0.39	0.390	±20	28.3	26	45	1.55	2.5	R39MF
RIS1040A-R75MF	0.75	0.766	±20	18.8	18.5	32.7	3.40	3.5	R75MF
RIS1040A-1R2MF	1.2	1.32	±20	16.0	14.4	25.5	4.70	4.5	1R2MF
RIS1040A-1R9MF	1.9	1.90	±20	12.4	11.8	20.9	7.7	5.5	1R9MF
RIS1040A-2R6MF	2.6	2.65	±20	10.2	10.0	17.7	11.4	6.5	2R6MF
RIS1040A-3R5MF	3.5	3.52	±20	8.50	8.7	15.3	16.5	7.5	3R5MF
RIS1040A-4R5MF	4.5	4.52	±20	8.00	7.7	13.5	18.6	8.5	4R5MF
RIS1040A-5R6MF	5.6	5.65	±20	6.70	6.9	12.1	26.3	9.5	5R6MF
RIS1040A-6R9MF	6.9	6.90	±20	6.40	6.2	10.9	28.9	10.5	6R9MF
RIS1040A-8R2MF	8.2	8.27	±20	5.50	5.7	10.0	39.6	11.5	8R2MF
RIS1040A-100MF	10.0	9.77	±20	5.20	5.2	9.2	43.6	12.5	100MF
RIS1040A-150MF	15.0	15.02	±20	4.10	4.2	7.4	68.6	15.5	150MF
RIS1040A-220MF	22.0	21.40	±20	3.40	3.5	6.2	99.5	18.6	220MF
RIS1040A-330MF	33.0	31.65	±20	2.70	2.9	5.1	154	22.6	330MF
RIS1040A-470MF	47.0	47.28	±20	2.20	2.4	4.2	237	27.6	470MF

**Notes:**

1. Ordering Information: RIS1040A - bbbaFc.

RIS1040A = Product Type.

a = Tolerance of Inductance (M = ± 20%).

bbb = Rated inductance value in uH (i.e. 1R5 = 0.15uH; 1R2 = 1.2uH; 220 = 22.0 uH).

F = Internal Control Code.

c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).

2. Inductance is tested at 0.1Vrms, 100kHz.

3. Heating current, Irms, is the current required to raise the component temperature by approximately 40°C. The heating current is determined by mounting the component on a typical PCB and applying current for 30 minutes.

4. Saturation current, Isat, indicates the value of DC current when the inductance is 15% (typical) lower than its initial value at an ambient temperature of 25°C.

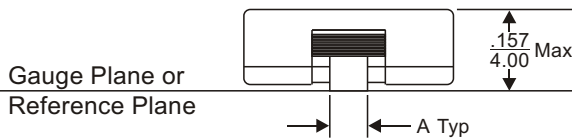
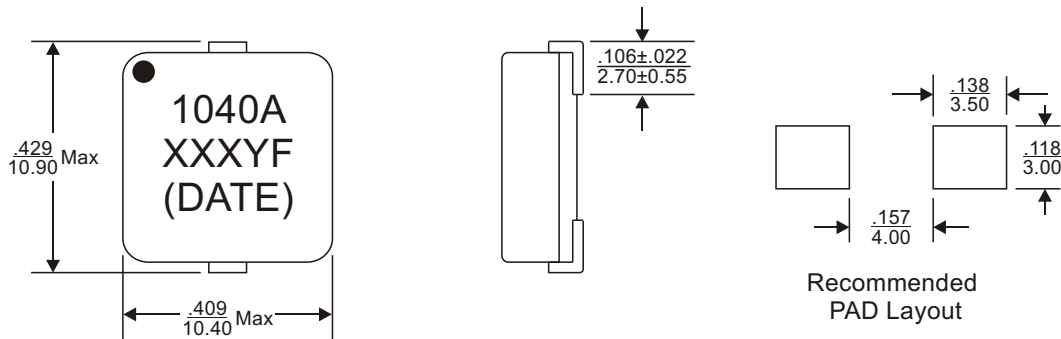
5. Saturation current, Isat, indicates the value of DC current when the inductance is 30% (typical) lower than its initial value at an ambient temperature of 25°C.

6. Operating temperature range: -40°C to +125°C.

7. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



**MECHANICAL DIMENSIONS**



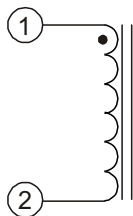
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RIS1040A-R75MF	.083/2.10
RIS1040A-1R2MF	.083/2.10
RIS1040A-1R9MF	.083/2.10
Through	
RIS1040A-470MF	.106/2.70

**Notes:**

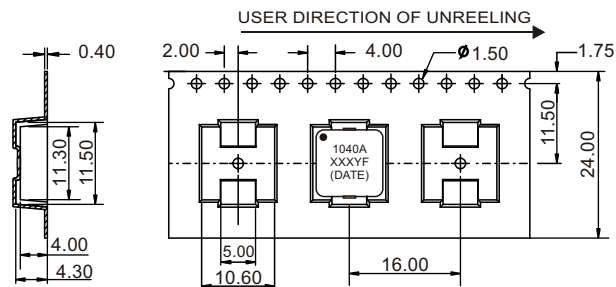
- All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
- Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$

Weight (in gram)	: 2.4 typ.
Tape & Reel	: 800 / reel

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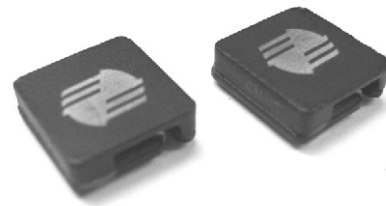
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-  Used in high power application
-  Large permissible DC current
-  Ideal for computers and portable power devices, DC-DC converters, energy storage applications and Input-Output filter applications
-  Operating temperature -40 C to +130 C
-  RoHS compliant



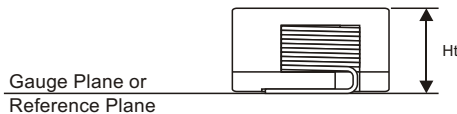
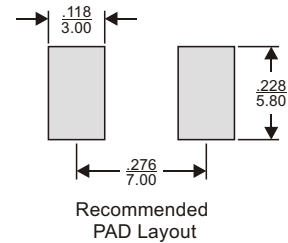
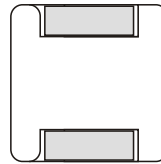
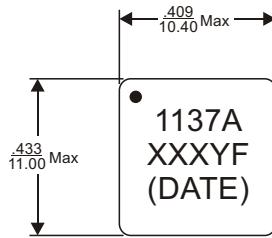
ELECTRICAL SPECIFICATION @ 25°C									
Part Number	Inductance @0Adc <sup>2</sup>		Inductance <sup>3</sup> @ Irated (uH Typ)	Irated <sup>4</sup> (A)	DCR (mΩ)		Saturation Current Isat (A)	Heating Current Idc (A)	Marking (XXXY)
	Nominal (uH)	Tolerances (%)			Typ	Max			
RIS1137A-331MF	0.33	±20	0.30	24	1.7	2.2	38	24	331M
RIS1137A-601MF	0.60	±20	0.53	19	2.8	3.2	27	19	601M
RIS1137A-102MF	1.00	±20	0.91	14	5.3	5.8	21.5	14	102M

**Notes:**

- Ordering Information: RIS1137A - bbbaFc.  
RIS1137A = Product Type.  
a = Tolerance of Inductance (M = ± 20%).  
bbb = Inductance value in uH (i.e. 331 = 0.33uH; 102 = 1.00uH).  
F = Internal Control Code.  
c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).
- Inductance is tested at 0.1Vrms, 100kHz @ 0Adc.
- Inductance at Irated is a typical inductance value for the component taken at rated current.
- The rated current listed is the lower of the saturation current @ 25°C or the heating current.
- Saturation current, Isat, indicates the value of DC current when the inductance is 20% (typical) lower than its initial value at an ambient temperature of 25°C.
- Heating current, Idc, is the current required to raise the component temperature by approximately 40°C. The heating current is determined by mounting the component on a typical PCB and applying current for 30 minutes.
- Operating temperature range: -40°C to +130°C.
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



**MECHANICAL DIMENSIONS**



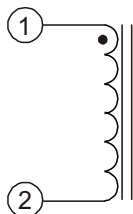
E&E Part Number	Ht (in./mm Max)
RIS1137A-331M	.146/3.70
RIS1137A-601M	.146/3.70
RIS1137A-102M	.142/3.60

**Notes:**

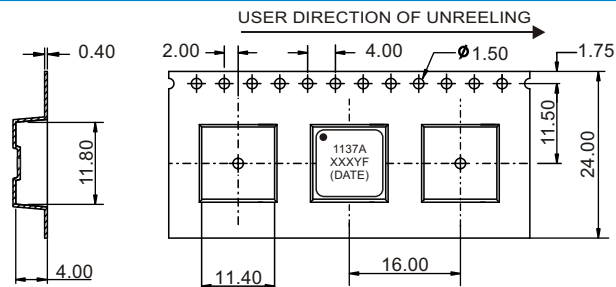
- All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
- Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 1.6 typ.
Tape & Reel	: 850 / reel

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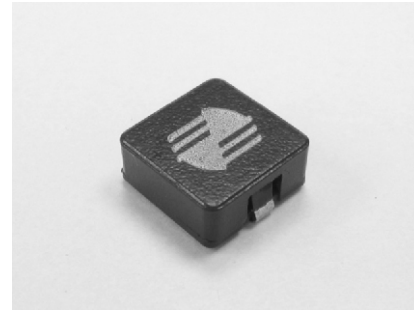
Email: eempl@eleceltek.com

Website: <http://www.eleceltek.com> / [www.eemagnetic.com](http://www.eemagnetic.com)

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-  Used in high power application
-  Large permissible DC current
-  Ideal for computers and portable power devices, DC-DC converters, energy storage applications and Input-Output filter applications
-  Operating temperature -40 C to +125 C
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

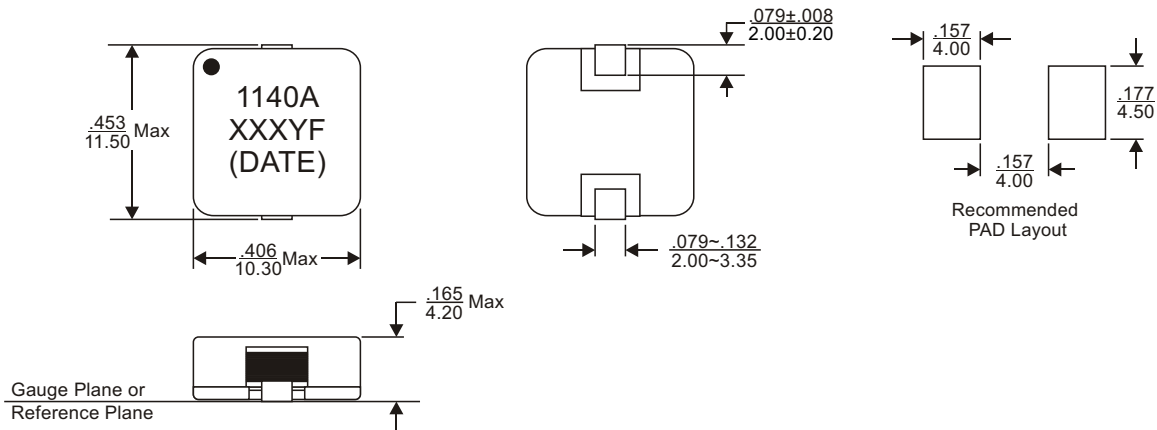
Part Number	Inductance <sup>2</sup>		Inductance <sup>3</sup> @ Irated (uH Typ)	Irated <sup>4</sup> (A)	DCR (mΩ)		Inductance <sup>5</sup> @ Bias (uH±20%)	Saturation <sup>6</sup> Current Isat (A)	Heating <sup>7</sup> Current Idc (A)	Marking (XXXY)
	Nominal (uH)	Tolerances (%)			Typ	Max				
RIS1140A-201LF	0.20	±15	0.17	30	0.45	0.55	0.18 @ 21Adc	30	38	201L
RIS1140A-241LF	0.24	±15	0.20	29	0.85	0.95	0.22 @ 27Adc	30	29	241L
RIS1140A-401LF	0.40	±15	0.34	29	1.05	1.15	0.36 @ 17Adc	29	29	401L
RIS1140A-471LF	0.47	±15	0.40	27	1.53	1.68	0.42 @ 24Adc	29	27	471L
RIS1140A-601LF	0.60	±15	0.51	22	1.70	1.87	0.56 @ 15Adc	22	27	601L
RIS1140A-102LF	1.00	±15	0.90	20	2.80	3.20	0.87 @ 26Adc	20	21	102L
RIS1140A-152LF	1.50	±15	1.35	16	4.50	5.00	1.20 @ 17Adc	18	16	152L
RIS1140A-182LF	1.80	±15	1.57	16	4.50	5.00	1.57 @ 16Adc	16	16	182L
RIS1140A-222LF	2.20	±15	2.10	13	6.60	7.00	1.80 @ 20Adc	14	13	222L
RIS1140A-472LF	4.70	±15	4.00	6.5	12.90	14.20	3.85 @ 7Adc	7.6	6.5	472L

**Notes:**

- Ordering Information: RIS1140A - bbbaFc.  
RIS1140A = Product Type.  
a = Tolerance of Inductance (L = ± 15%).  
bbb = Inductance value in uH (i.e. 241 = 0.24uH; 102 = 1.00uH; 222 = 2.2uH).  
F = Internal Control Code.  
c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).
- Inductance is tested at 0.1Vrms, 100kHz @ 0Adc.
- Inductance at Irated is a typical inductance value for the component taken at rated current.
- The rated current listed is the lower of the saturation current @ 25°C or the heating current.
- The inductance at Bias is the controlled inductance value measured after subjecting the part to the listed dc bias current.
- Saturation current, Isat, indicates the value of DC current when the inductance is 20% (typical) lower than its initial value at an ambient temperature of 25°C.
- Heating current, Idc, is the current required to raise the component temperature by approximately 40°C. The heating current is determined by mounting the component on a typical PCB and applying current for 30 minutes.
- Operating temperature range: -40°C to +125°C.
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



**MECHANICAL DIMENSIONS**

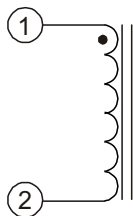


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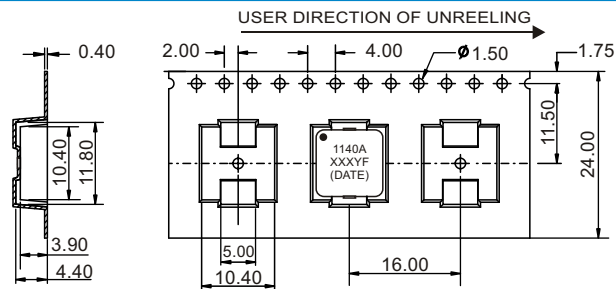
10. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
11. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{.025}$ .

Weight (in gram)	: 2.0 typ.
Tape & Reel	: 850 / reel

**SCHEMATIC**



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**FOR MORE INFORMATION, PLEASE CONTACT**

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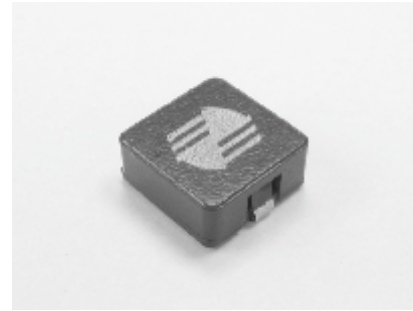
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Website: <http://www.eleceltek.com> / [www.eemagnetic.com](http://www.eemagnetic.com)

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-  Used in high power application
-  Large permissible DC current
-  Ideal for computers and portable power devices, DC-DC converters, energy storage applications and Input-Output filter applications
-  Operating temperature -55 C to +125 C
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Inductance <sup>2</sup> @0Adc ( H 20%)	DCR (m Max)	Saturation <sup>3</sup> Current Isat(A)	Heating <sup>4</sup> Current Irms(A)	Marking (XXXY)
RIS1265A-R47MF	0.47	1.20	51	41	R47M
RIS1265A-R56MF	0.56	1.40	46	37	R56M
RIS1265A-R68MF	0.68	1.60	42	35	R68M
RIS1265A-R82MF	0.82	1.90	38	33	R82M
RIS1265A-1R0MF	1.00	2.00	35	32	1R0M
RIS1265A-1R5MF	1.50	3.00	28	27	1R5M
RIS1265A-2R2MF	2.20	4.20	23	22	2R2M
RIS1265A-3R3MF	3.30	6.80	19	18	3R3M
RIS1265A-6R8MF	6.80	14.00	13	11.5	6R8M
RIS1265A-180M	18	24.2	7.5	6.7	180M

**Notes:**

1. Ordering Information: RIS1265A - bbbaFc.

RIS1265A = Product Type.

a = Tolerance of Inductance (M =  $\pm 20\%$ ).

bbb = Inductance value in uH (i.e. R68 = 0.68uH; 6R8 = 6.8uH ).

F = Internal Control Code.

c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).

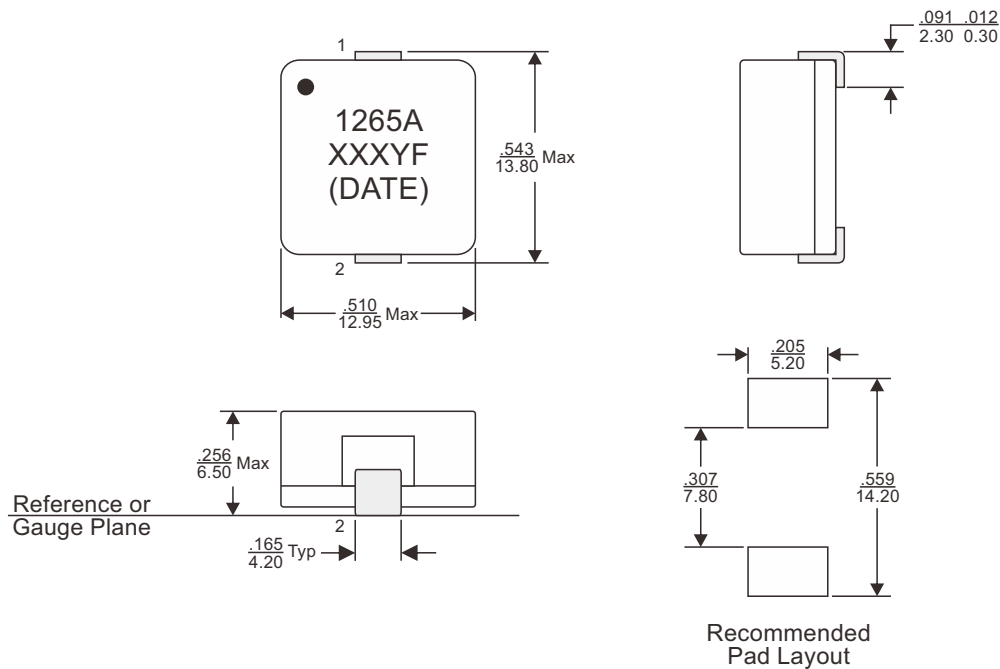
2. Inductance is tested at 100kHz, 0.1Vrms, 0Adc.

3. Saturation current, Isat, is the DC current at which the inductance of the component drops by 20% typical at ambient temperature of 25 C.

4. Heating current, Irms, is the current required to raise the part temperature by approximately 40 C.

5. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

## MECHANICAL DIMENSIONS



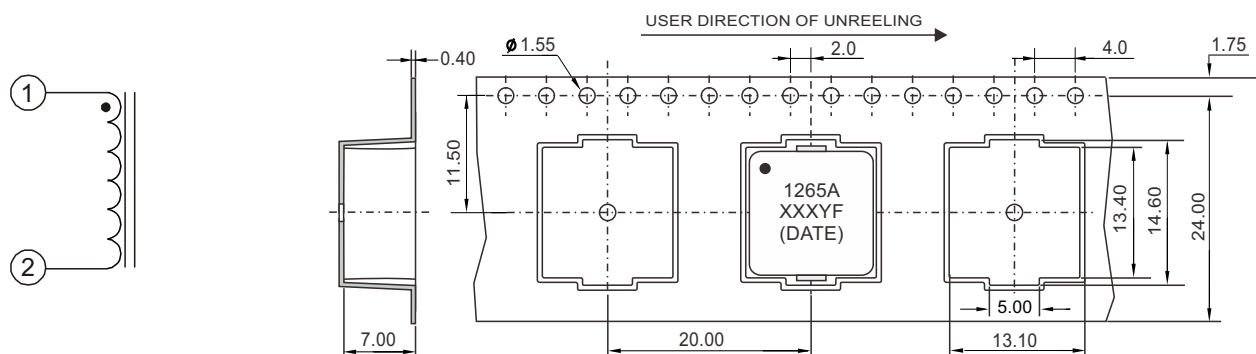
### Notes:

6. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
7. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{.025}$ .

Weight (in gram) : 3.5 typ.  
Tape & Reel : 350 / reel

## SCHEMATIC

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**FOR MORE INFORMATION, PLEASE CONTACT**

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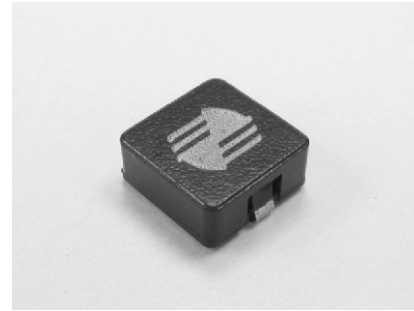
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- Low profile and low DCR
- High energy storage and high DC current
- Ideal for computers and portable power devices, DC-DC converters, energy storage applications and Input-Output filter applications
- Operating temperature -40 C to +125 C
- RoHS compliant



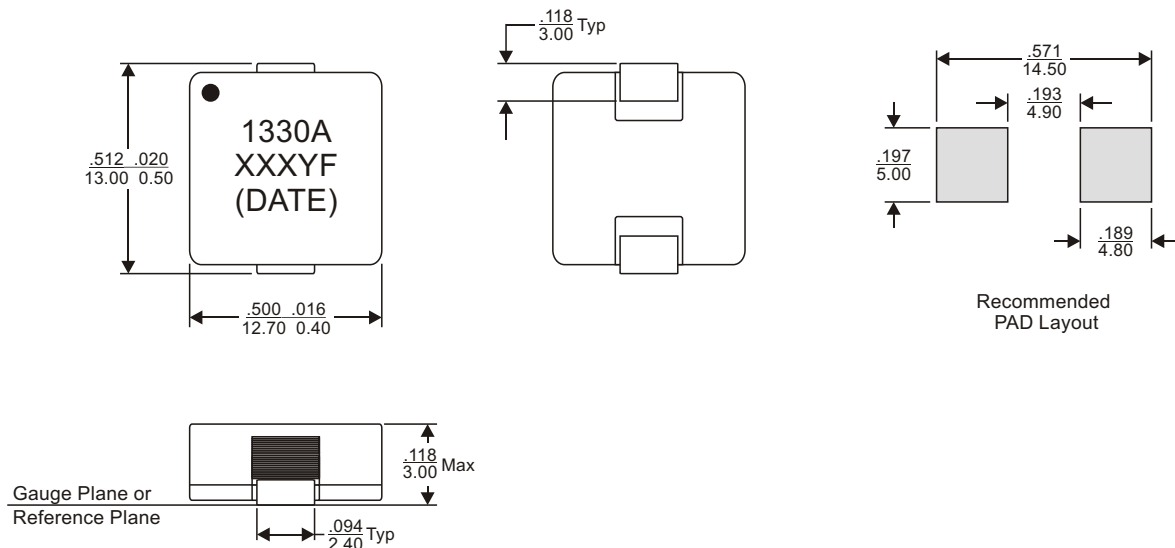
ELECTRICAL SPECIFICATION @ 25°C							
Part Number	Inductance @0Adc <sup>2</sup>		Inductance <sup>3</sup> @ Isat (uH Typ)	DCR (m $\Omega$ ) Max	Saturation <sup>4</sup> Current Isat (A)	Heating <sup>5</sup> Current Idc (A)	Marking (XXXY)
	Nominal (uH)	Tolerances (%)					
RIS1330A-0R2MF	0.22	±20	0.20	1.5	25	13	0R2M
RIS1330A-0R5MF	0.50	±20	0.47	2.5	22	11	0R5M
RIS1330A-1R0MF	1.00	±20	0.90	10.0	11	9.5	1R0M

**Notes:**

- Ordering Information: RIS1330A - bbbaFc.  
RIS1330A = Product Type.  
a = Tolerance of Inductance (M = ± 20%).  
bbb = Inductance value in uH (i.e. 0R2 = 0.2uH; 1R0 = 1.0uH).  
F = Internal Control Code.  
c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).
- Inductance is tested at 0.1Vrms, 100kHz @ 0Adc.
- Inductance at Isat is a typical inductance value for the component taken at rated current.
- Saturation current, Isat, indicates the value of DC current when the inductance is 10% (typical) lower than its initial value at an ambient temperature of 25°C.
- Heating current, Idc, is the current required to raise the component temperature by approximately 40°C. The heating current is determined by mounting the component on a typical PCB and applying current for 30 minutes.
- Operating temperature range: -40°C to +125°C.
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



**MECHANICAL DIMENSIONS**

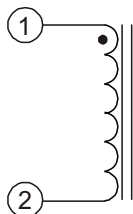


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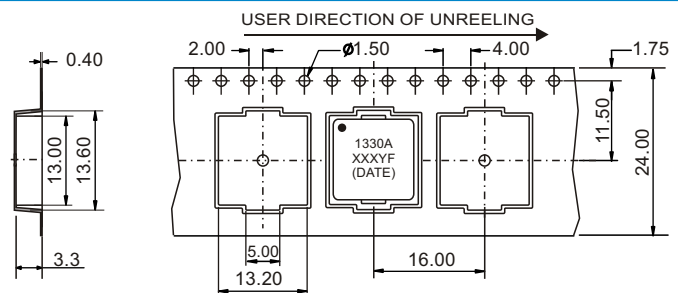
8. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
9. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 3.0 typ.
Tape & Reel	: 1100 / reel

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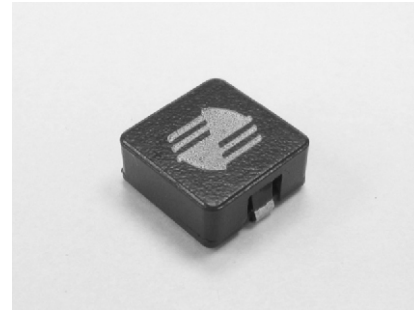
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- Low profile and low DCR
- High energy storage and high DC current
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- Operating temperature -40 C to +125 C
- RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

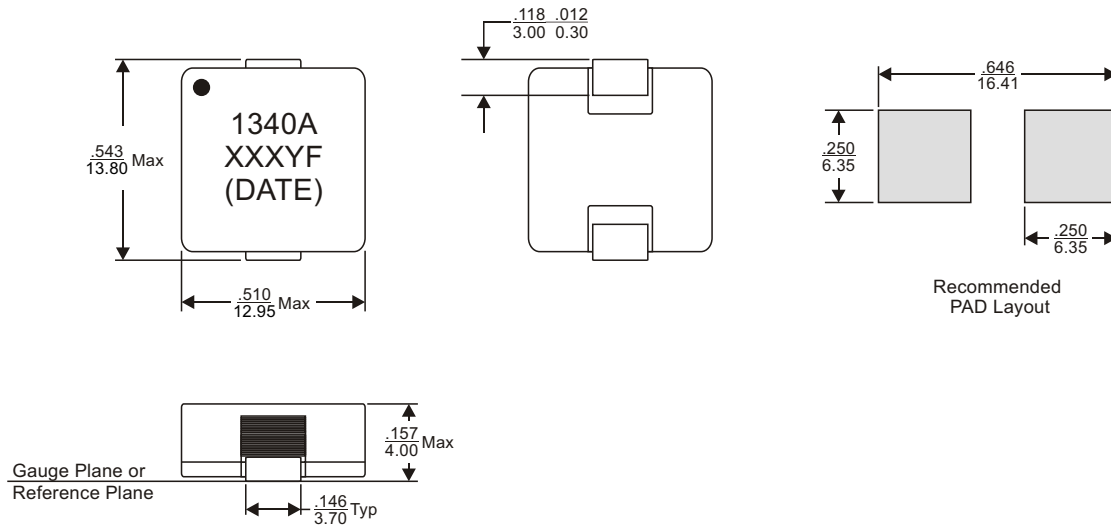
Part Number	Inductance @0Adc <sup>2</sup>		DCR (m $\Omega$ ) Max	Saturation Current Isat (A) <sup>4</sup>	Heating Current Idc (A) <sup>5</sup>	Marking (XXXY)
	Nominal (uH)	Tolerances (%)				
RIS1340A-103MF	10	±20	22.0	7.10	9.5	103M
RIS1340A-153MF	15	±20	35.5	6.00	7.5	153M
RIS1340A-223MF	22	±20	54.0	4.50	6.0	223M
RIS1340A-473MF	47	±20	100.0	3.00	4.7	473M
RIS1340A-104MF	100	±20	228.5	2.25	3.2	104M

**Notes:**

- Ordering Information: RIS1340A - bbbaFc.  
RIS1340A = Product Type.  
a = Tolerance of Inductance (M = ± 20%).  
bbb = Inductance value in uH (i.e. 153 = 15uH; 104 = 100uH).  
F = Internal Control Code.  
c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).
- Inductance is tested at 0.1Vrms, 100kHz @ 0Adc.
- Saturation current, Isat, indicates the value of DC current when the inductance is 20% (typical) lower than its initial value at an ambient temperature of 25°C.
- Heating current, Idc, is the current required to raise the component temperature by approximately 40°C. The heating current is determined by mounting the component on a typical PCB and applying current for 30 minutes.
- Operating temperature range: -40°C to +125°C.
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



MECHANICAL DIMENSIONS

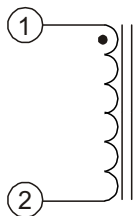


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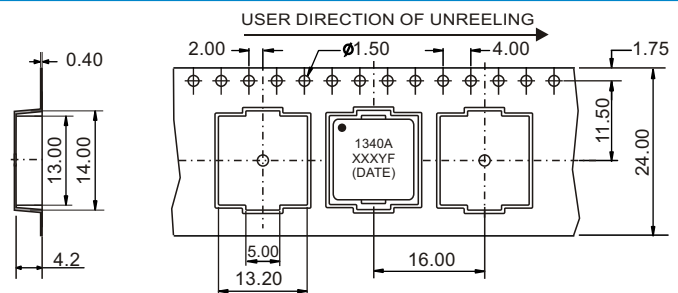
7. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
8. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 3.5 typ.
Tape & Reel	: 900 / reel

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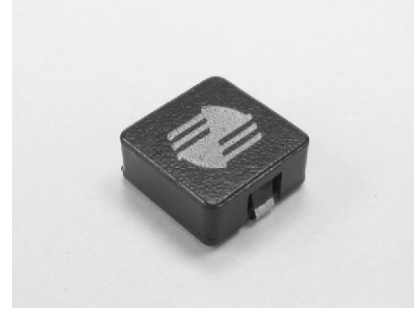
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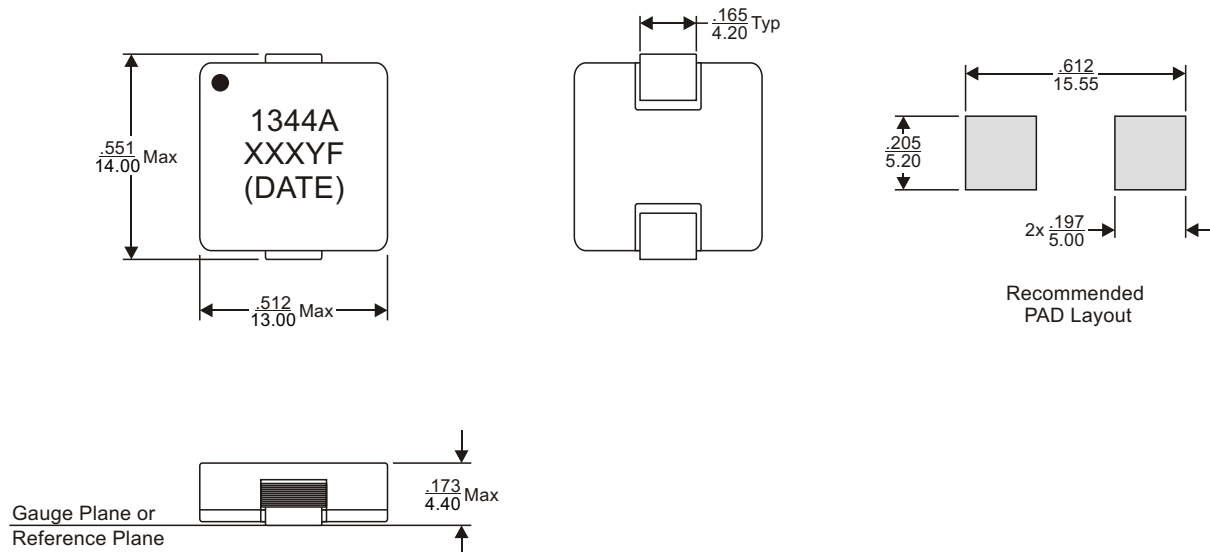
ELECTRICAL SPECIFICATION @ 25°C									
Part Number	Inductance @0Adc <sup>2</sup>		Inductance <sup>3</sup> @ Irated (uH Typ)	Irated <sup>4</sup> (A)	DCR (mΩ)		Saturation Current Isat (A)	Heating Current Idc (A)	Marking (XXXY)
	Nominal (uH)	Tolerances (%)			Typ	Max			
RIS1344A-351MF	0.35	±20	0.28	40	1.30	1.80	40	61	351M
RIS1344A-651MF	0.65	±20	0.52	32	2.30	2.80	32	45	651M
RIS1344A-112MF	1.10	±20	0.88	24	3.60	4.20	24	34	112M
RIS1344A-182MF	1.80	±20	1.44	18	4.50	6.10	18	25	182M

**Notes:**

- Ordering Information: RIS1344A - bbbaFc.  
RIS1344A = Product Type.  
a = Tolerance of Inductance (M = ± 20%).  
bbb = Inductance value in uH (i.e. 351 = 0.35uH; 112 = 1.10uH).  
F = Internal Control Code.  
c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).
- Inductance is tested at 0.1Vrms, 100kHz @ 0Adc.
- Inductance at Irated is a typical inductance value for the component taken at rated current.
- The rated current listed is the lower of the saturation current @ 25°C or the heating current.
- Saturation current, Isat, indicates the value of DC current when the inductance is 20% (typical) lower than its initial value at an ambient temperature of 25°C.
- Heating current, Idc, is the current required to raise the component temperature by approximately 40°C. The heating current is determined by mounting the component on a typical PCB and applying current for 30 minutes.
- Operating temperature range: -40°C to +130°C.
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



**MECHANICAL DIMENSIONS**

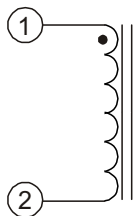


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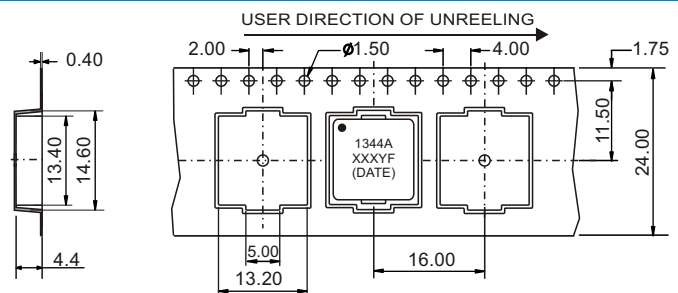
7. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
8. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 3.5 typ.
Tape & Reel	: 800 / reel

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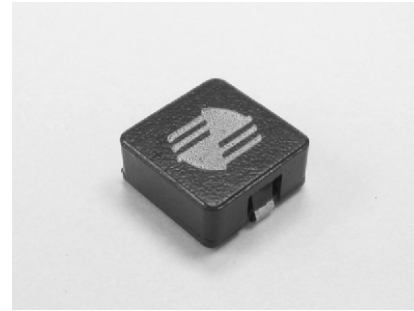
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-  Large permissible DC current
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-  Operating temperature -40 C to +125 C
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

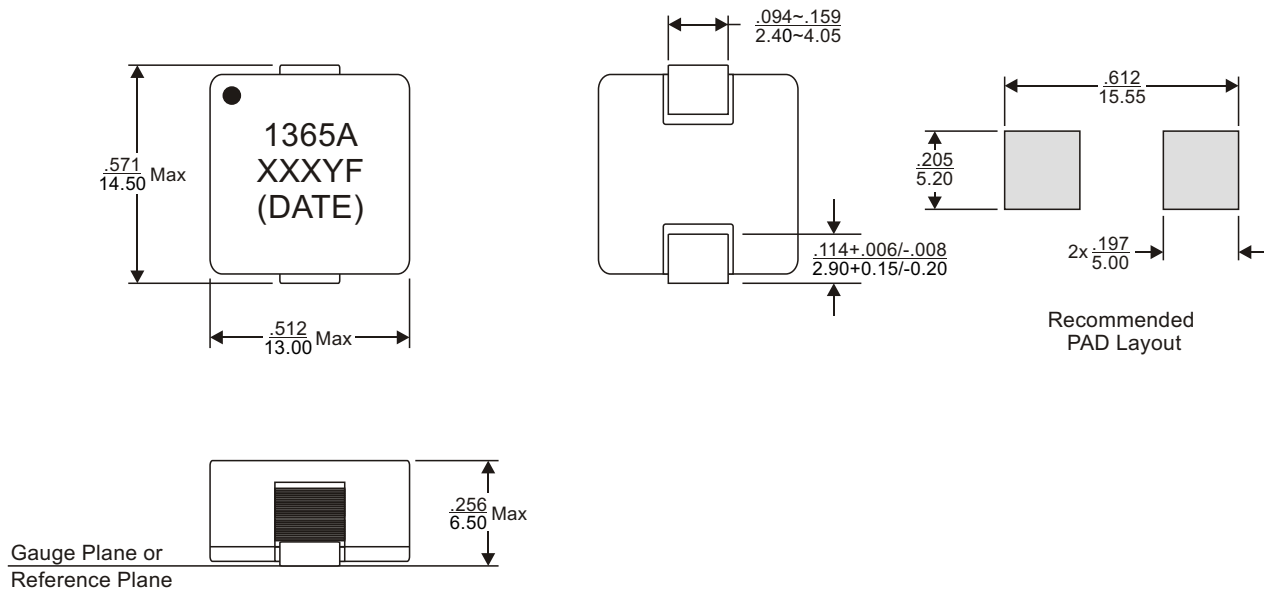
Part Number	Inductance <sup>2</sup>		Inductance <sup>3</sup> @ Irated (uH Typ)	Irated <sup>4</sup> (A)	DCR (m )		Saturation <sup>5</sup> Current Isat (A)	Heating <sup>6</sup> Current Idc (A)	Marking (XXXY)
	Nominal (uH)	Tolerances (%)			Typ	Max			
RIS1365A-451MF	0.45	±20	0.34	45	0.75	0.80	48	45	451M
RIS1365A-801MF	0.80	±20	0.68	35	1.20	1.30	38	35	801M
RIS1365A-142MF	1.40	±20	1.16	27	2.00	2.10	28	27	142M
RIS1365A-202MF	2.00	±20	1.66	23	2.80	2.90	24	23	202M
RIS1365A-282MF	2.80	±20	2.32	19	4.10	4.20	20	19	282M

**Notes:**

- Ordering Information: RIS1365A - bbbaFc.  
RIS1365A = Product Type.  
a = Tolerance of Inductance (M = ± 20%).  
bbb = Inductance value in uH (i.e. 451 = 0.45uH; 282 = 2.8uH).  
F = Internal Control Code.  
c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).
- Inductance is tested at 0.1Vrms, 100kHz .
- Inductance at Irated is a typical inductance value for the component taken at rated current.
- The rated current listed is the lower of the saturation current @ 25°C or the heating current.
- Saturation current, Isat, indicates the value of DC current when the inductance is 20% (typical) lower than its initial value at an ambient temperature of 25°C.
- Heating current, Idc, is the current required to raise the component temperature by approximately 40°C. The heating current is determined by mounting the component on a typical PCB and applying current for 30 minutes.
- Operating temperature range: -40°C to +125°C.
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



MECHANICAL DIMENSIONS

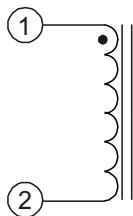


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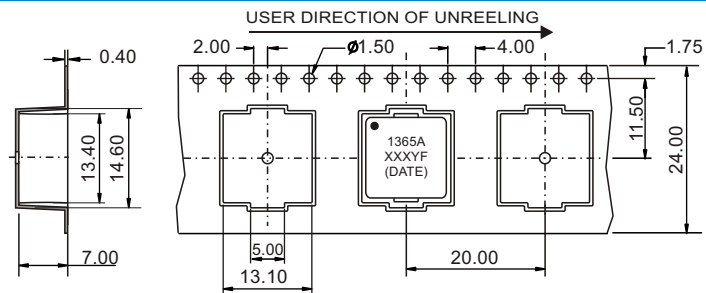
9. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
10. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 5.5 typ.
Tape & Reel	: 350 / reel

SCHEMATIC



PACKAGING



FOR MORE INFORMATION, PLEASE CONTACT

HEADQUARTER

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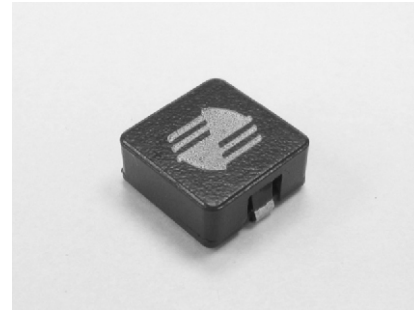
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-  Used in high power application
-  Large permissible DC current
-  Ideal for computers and portable power devices, DC-DC converters, energy storage applications and Input-Output filter applications
-  Operating temperature -40 C to +125 C
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Inductance <sup>2</sup>		Rated Inductance (uH)	DCR (m Ω) Max	Isat <sup>3</sup> 20% rolloff (A)	Isat <sup>4</sup> 30% rolloff (A)	I <sub>rms</sub> <sup>5</sup> (A)	Marking (XXXY)
	Nominal (uH)	Tolerances (%)						
RIS1375A-R20LF	0.218	±15	0.20	0.50	65	95	46.7	R20L
RIS1375A-R47LF	0.544	±15	0.47	0.88	40	57	33.7	R47L
RIS1375A-1R0LF	1.04	±15	1.0	1.87	28	41	23.7	1R0L
RIS1375A-1R5LF	1.70	±15	1.5	2.27	22	32	21.0	1R5L
RIS1375A-2R2LF	2.53	±15	2.2	3.37	18	26	17.2	2R2L
RIS1375A-3R3LF	3.52	±15	3.3	4.87	15	22	14.3	3R3L
RIS1375A-4R3LF	4.67	±15	4.3	5.90	13.2	19.1	13.0	4R3L
RIS1375A-6R8LF	7.45	±15	6.8	9.40	11.4	15.1	10.3	6R8L
RIS1375A-100LF	10.9	±15	10.0	14.0	8.6	12.5	8.50	100L
RIS1375A-220LF	22.4	±15	22.0	25.7	6.0	8.7	6.30	220L
RIS1375A-330LF	34.5	±15	33.0	48.8	4.8	7.0	4.42	330L
RIS1375A-470LF	49.2	±15	47.0	72.3	3.9	5.7	3.65	470L

**Notes:**

1. Ordering Information: RIS1375A - bbbaFc.

RIS1375A = Product Type.

a = Tolerance of Inductance (L = ±15%).

bbb = Rated inductance value in uH (i.e. R47 = 0.47uH; 2R2 = 2.2uH; 220 = 22.0 uH).

F = Internal Control Code.

c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).

2. Inductance is tested at 0.1Vrms, 100kHz .

3. Saturation current, Isat, indicates the value of DC current when the inductance is 20% (typical) lower than its initial value at an ambient temperature of 25°C.

4. Saturation current, Isat, indicates the value of DC current when the inductance is 30% (typical) lower than its initial value at an ambient temperature of 25°C.

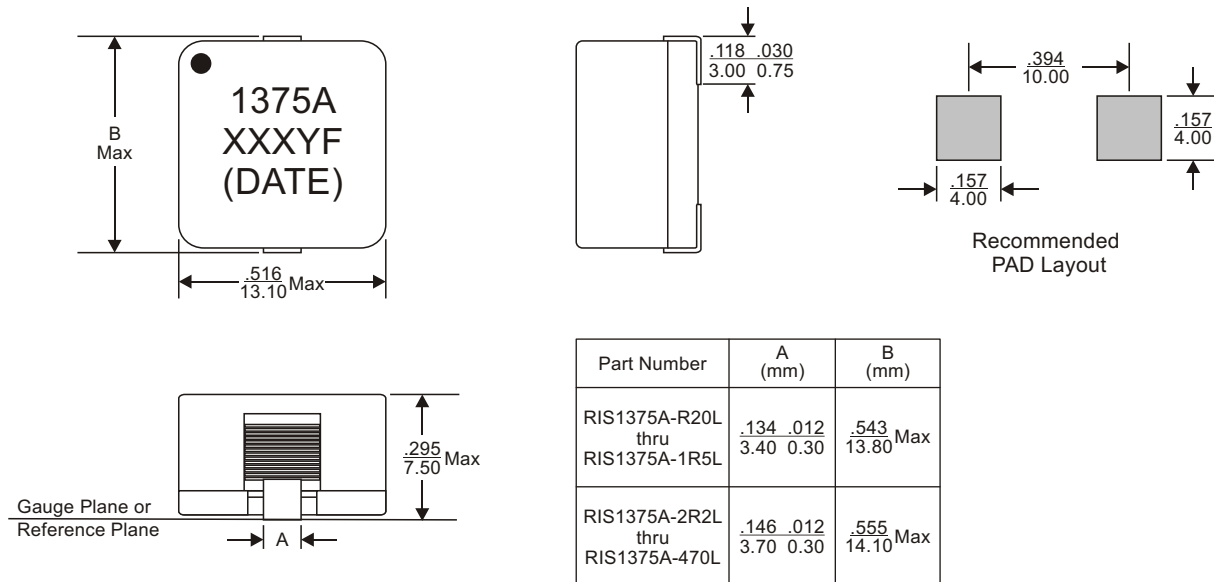
5. Heating current, I<sub>rms</sub>, is the current required to raise the component temperature by approximately 40°C. The heating current is determined by mounting the component on a typical PCB and applying current for 30 minutes.

6. Operating temperature range: -40°C to +125°C.

7. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



MECHANICAL DIMENSIONS

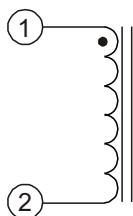


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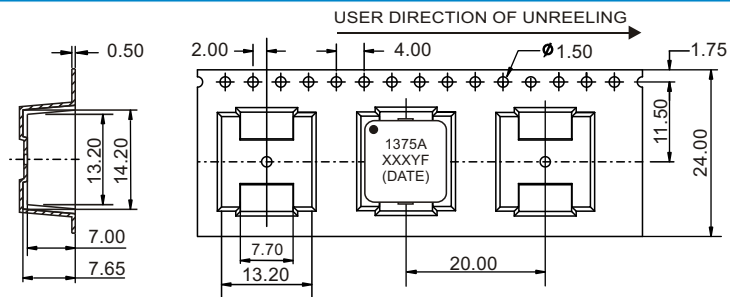
8. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.  
9. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$

Weight (in gram)	: 5.5 typ.
Tape & Reel	: 350 / reel

SCHEMATIC



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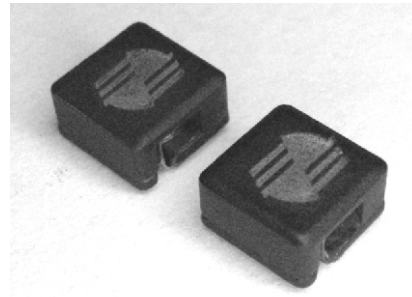
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-  Used in high power application
-  Large permissible DC current
-  Ideal for computers and portable power devices, DC-DC converters, energy storage applications and Input-Output filter applications
-  Operating temperature -40 °C to +125 °C
-  RoHS compliant



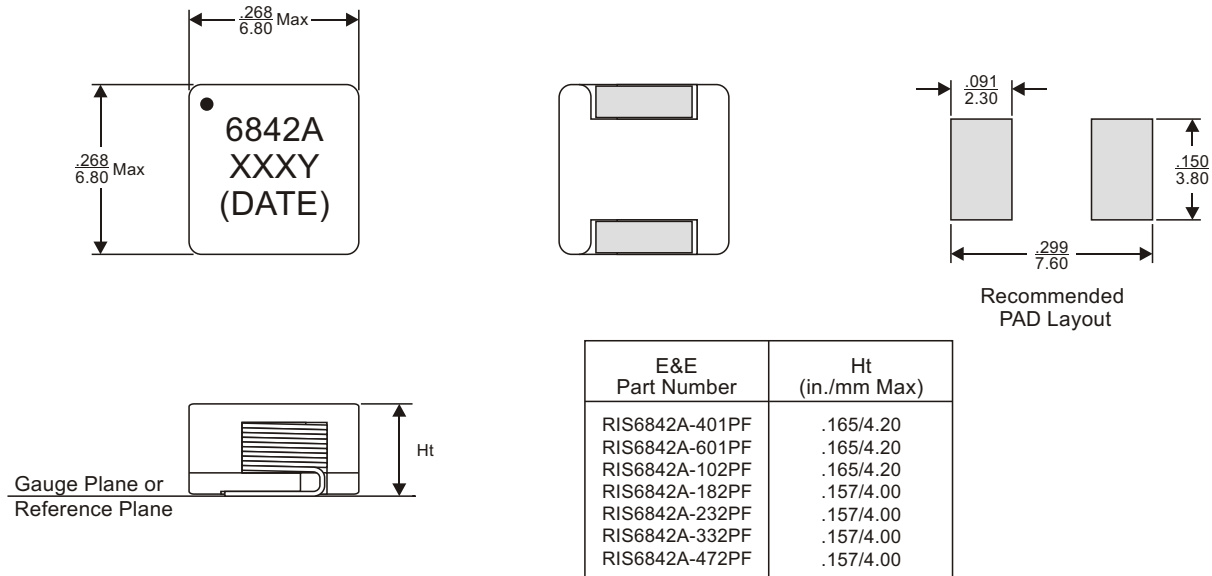
ELECTRICAL SPECIFICATION @ 25°C									
Part Number	Inductance @0Adc <sup>2</sup>		Inductance <sup>3</sup> @ Irated (uH Typ)	Irated <sup>4</sup> (A)	DCR (mΩ)		Saturation Current Isat (A)	Heating Current Idc (A)	Marking (XXXY)
	Nominal (uH)	Tolerances (%)			Typ	Max			
RIS6842A-401PF	0.40	±25	0.32	17.5	3.0	3.2	27	17.5	401P
RIS6842A-601PF	0.60	±25	0.48	15	4.5	4.8	21	15	601P
RIS6842A-102PF	1.00	±25	0.80	12	6.6	7.2	17	12	102P
RIS6842A-182PF	1.80	±25	1.44	8.0	15.6	16.0	13	8.0	182P
RIS6842A-232PF	2.30	±25	1.84	7.5	17.5	18.0	11.5	7.5	232P
RIS6842A-332PF	3.30	±25	2.64	5.8	26.6	27.5	9.5	5.8	332P
RIS6842A-472PF	4.70	±25	3.76	4.5	36.6	38.0	8	4.5	472P

**Notes:**

- Ordering Information: RIS6842A - bbbaFc.  
RIS6842A = Product Type.  
a = Tolerance of Inductance (P = ± 25%).  
bbb = Inductance value in uH (i.e. 401 = 0.40uH; 232 = 2.30uH).  
F = Internal Control Code.  
c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).
- Inductance is tested at 0.1Vrms, 100kHz @ 0Adc.
- Inductance at Irated is a typical inductance value for the component taken at rated current.
- The rated current listed is the lower of the saturation current @ 25°C or the heating current.
- Saturation current, Isat, indicates the value of DC current when the inductance is 20% (typical) lower than its initial value at an ambient temperature of 25°C.
- Heating current, Idc, is the current required to raise the component temperature by approximately 40°C. The heating current is determined by mounting the component on a typical PCB and applying current for 30 minutes.
- Operating temperature range: -40°C to +125°C.
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



**MECHANICAL DIMENSIONS**

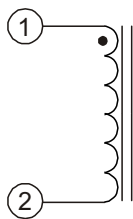


**Notes:**

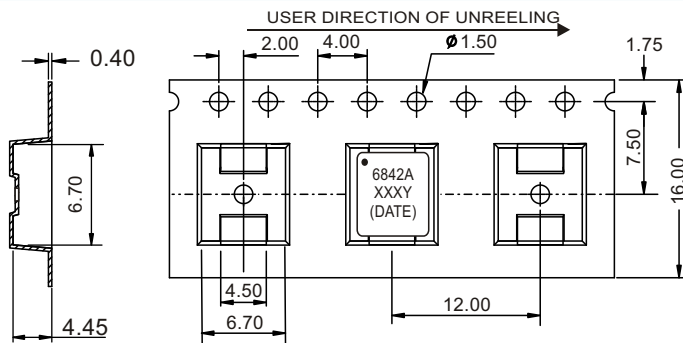
9. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.  
10. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 1.0 typ.
Tape & Reel	: 1100 / reel

**SCHEMATIC**



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**FOR MORE INFORMATION, PLEASE CONTACT**

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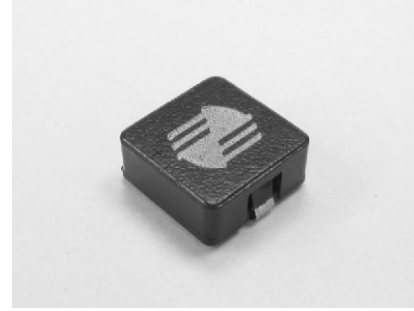
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- Low profile SMD type.
- High energy storage and low DCR.
- Magnetically shielded, suitable for high density mounting.
- Ideal for power source circuits, DC-DC convert, DC-AC Inverters inductor and input-Output filter application.
- Operating temperature -40 C to +125 C
- RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Inductance <sup>2</sup> (uH)±20%	Inductance at Isat (uH) Typ	DCR (m Ω) Max	Isat <sup>3</sup> (A)	Irms <sup>4</sup> (A)	Marking (XXXY)
	M					
RIS7030A-0R1MF	0.10	0.08	2.5	30	20	0R1M
RIS7030A-0R2MF	0.20	0.16	3.4	18	16	0R2M
RIS7030A-R47MF	0.47	0.40	4.1	12	14	R47M
RIS7030A-R68MF	0.68	0.60	5.3	10	12	R68M
RIS7030A-1R0MF	1.00	0.90	10	8.5	7	1R0M

**Notes:**

1. Ordering Information: RIS7030A - bbbaFc.

RIS7030A = Product Type.

a = Tolerance of Inductance (L = ± 20%).

bbb = Rated inductance value in uH (i.e. R47 = 0.47uH; 1R0 = 1.0uH).

F = Internal Control Code.

c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).

2. Inductance is tested at 1Vrms, 100kHz .

3. Saturation current, Isat, indicates the value of DC current when the inductance is 20% (typical) lower than its initial value at an ambient temperature of 25°C.

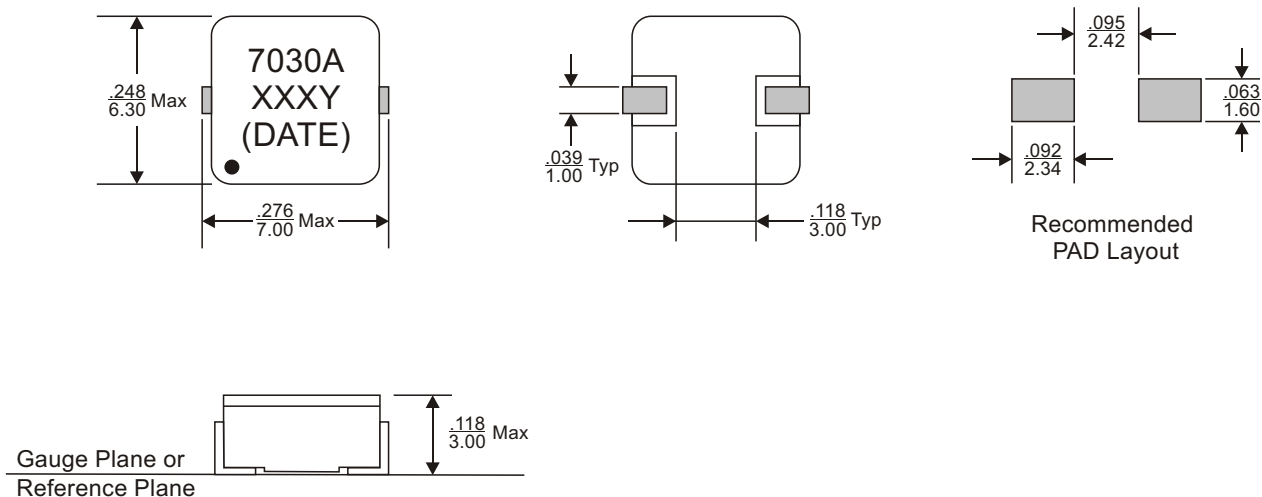
4. Heating current, Irms, is the current required to raise the component temperature by approximately 40°C. The heating current is determined by mounting the component on a typical PCB and applying current for 30 minutes.

5. Operating temperature range: -40°C to +125°C.

6. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



MECHANICAL DIMENSIONS

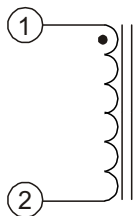


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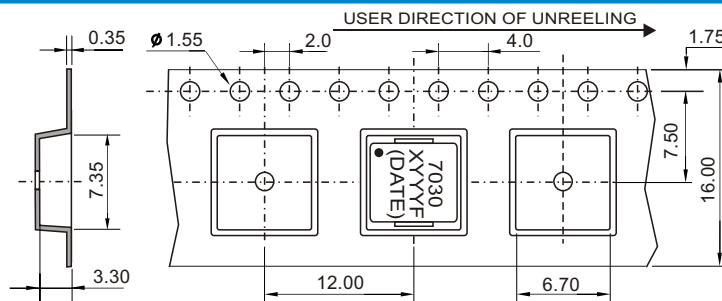
7. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
8. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$

Weight (in gram)	: 1.0 typ.
Tape & Reel	: 1500 / reel

SCHEMATIC



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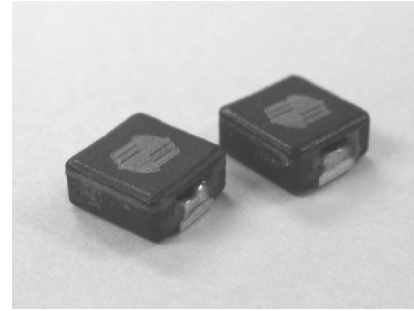
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- Low profile SMD type.
- High energy storage and low DCR.
- Magnetically shielded, suitable for high density mounting.
- Ideal for power source circuits, DC-DC convert, DC-AC Inverters inductor and input-Output filter application.
- Operating temperature -40 C to +125 C
- RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Inductance <sup>3</sup> @0Adc (uH ±25%)	Inductance <sup>4</sup> @Irated (uH Typ)	Irated <sup>5</sup> (A)	DCR (m Ω)		Saturation Current <sup>6</sup> Isat (A)	Heating Current <sup>7</sup> Idc(A)	Marking (XXXY)
				Typ	Max			
RIS7440A-401PF	0.40	0.32	17.5	3.0	3.2	27	17.5	401P
RIS7440A-601PF	0.60	0.48	15	4.5	4.8	21	15	601P
RIS7440A-102PF	1.00	0.80	12	6.6	7.2	17	12	102P
RIS7440A-182PF	1.80	1.44	8.0	15.6	16.0	13	8.0	182P
RIS7440A-232PF	2.30	1.84	7.0	17.5	18.0	11.5	7.5	232P
RIS7440A-332PF	3.30	2.64	5.5	26.6	27.5	9.5	5.8	332P
RIS7440A-472PF	4.70	3.76	4.5	36.6	38.0	8.0	4.5	472P

**Notes:**

1. Ordering Information: RIS7440A - bbbaFc.

RIS7440A = Product Type.

a = Tolerance of Inductance (P = ± 25%).

bbb = Inductance (@oAdc) value in uH (i.e. 601 = 0.60uH; 232 = 2.3uH).

F = Internal Control Code.

c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).

2. Inductance is tested at 0.1Vrms, 100kHz .

3. The inductance is the nominal inductance value measured at 0Adc bias current.

4. Inductance at Irated is a typical inductance value for the component taken at rated current.

5. The rated current listed is the lower of the saturation current @ 25°C or the heating current.

6. Saturation current, Isat, indicates the value of DC current when the inductance is 20% (typical) lower than its initial value at an ambient temperature of 25°C.

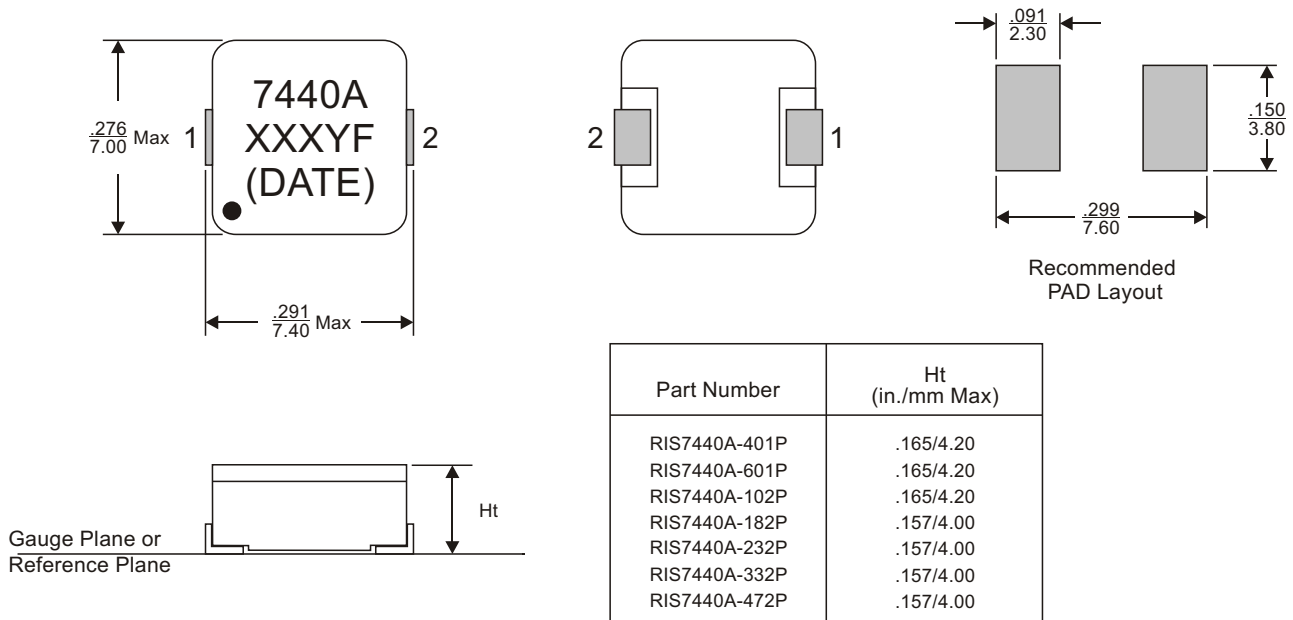
7. Heating current, Idc, is the DC current required to raise the component temperature by approximately 40°C. The heating current is determined by mounting the component on a typical PCB and applying current for 30 minutes.

8. Operating temperature range: -40°C to +125°C.

9. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



MECHANICAL DIMENSIONS

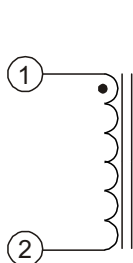


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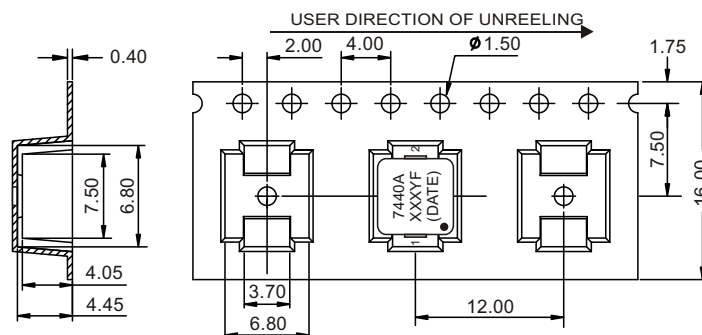
10. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.  
11. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 1.0 typ.
Tape & Reel	: 1100 / reel

SCHEMATIC



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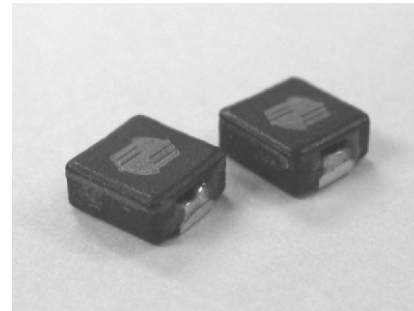
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- Low profile SMD type.
- High energy storage and low DCR.
- Magnetically shielded, suitable for high density mounting.
- Ideal for power source circuits, DC-DC convert, DC-AC Inverters inductor and input-Output filter application.
- Operating temperature -40 C to +125 C
- RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Inductance <sup>2</sup> (uH)	Inductance Tolerances(%)	DCR (m Ω) Max	Isat <sup>3</sup> (A)	Irms <sup>4</sup> (A)	Marking (XXXY)
		M				
RIS7532A-101MF	0.10	±20	1.5	60	34.5	101M
RIS7532A-151MF	0.15	±20	2.2	57	26.0	151M
RIS7532A-201MF	0.20	±20	2.2	46	26.0	201M
RIS7532A-221MF	0.22	±20	2.2	40	26.0	221M
RIS7532A-331MF	0.33	±20	3.4	34	20.0	331M
RIS7532A-471MF	0.47	±20	3.4	26	20.0	471M
RIS7532A-681MF	0.68	±20	5.4	25	15.5	681M
RIS7532A-821MF	0.82	±20	8.0	24	13.0	821M
RIS7532A-102MF	1.00	±20	8.0	22	13.0	102M
RIS7532A-152MF	1.50	±20	11.8	18	9.0	152M

**Notes:**

1. Ordering Information: RIS7532A - bbbaFc.

RIS7532A = Product Type.

a = Tolerance of Inductance (M = ± 20%).

bbb = Inductance value in uH (i.e. 151 = 0.15uH; 152 = 1.5uH).

F = Internal Control Code.

c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).

2. Inductance is tested at 100mVrms, 100kHz .

3. Saturation current, Isat, indicates the value of DC current when the inductance is 30% (typical) lower than its initial value at an ambient temperature of 25°C.

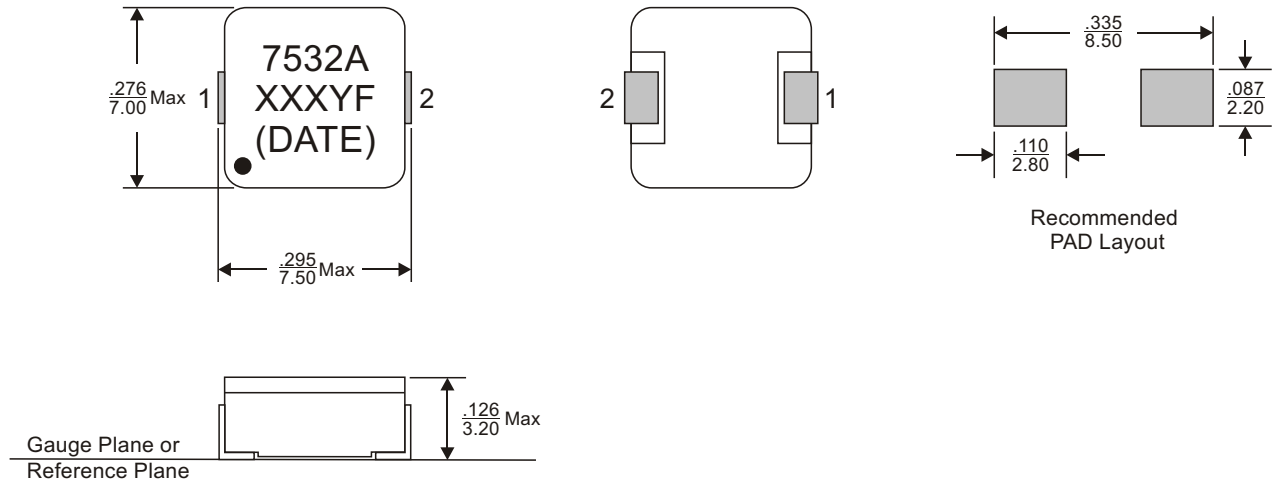
4. Heating current, Irms, is the current required to raise the component temperature by approximately 40°C. The heating current is determined by mounting the component on a typical PCB and applying current for 30 minutes.

5. Operating temperature range: -40°C to +125°C.

6. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



MECHANICAL DIMENSIONS

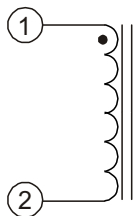


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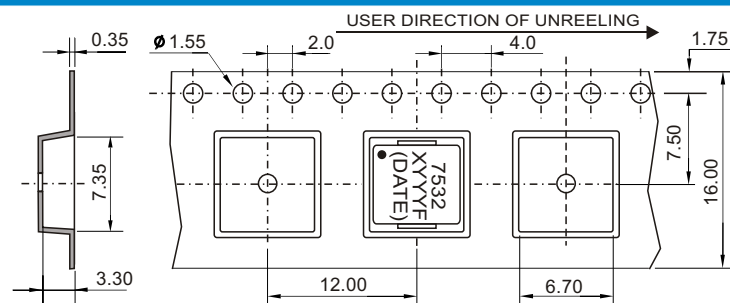
10. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
11. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 1.0 typ.
Tape & Reel	: 1500 / reel

SCHEMATIC



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-  Magnetically Shielded
-  Low DC resistance
-  High energy storage and high DC current
-  Ideal for computers and portable power devices, DC-DC converters, energy storage applications and Input-Output filter applications
-  Custom inductance value or tolerance is available
-  RoHS compliant



ELECTRICAL SPECIFICATION @ 25°C

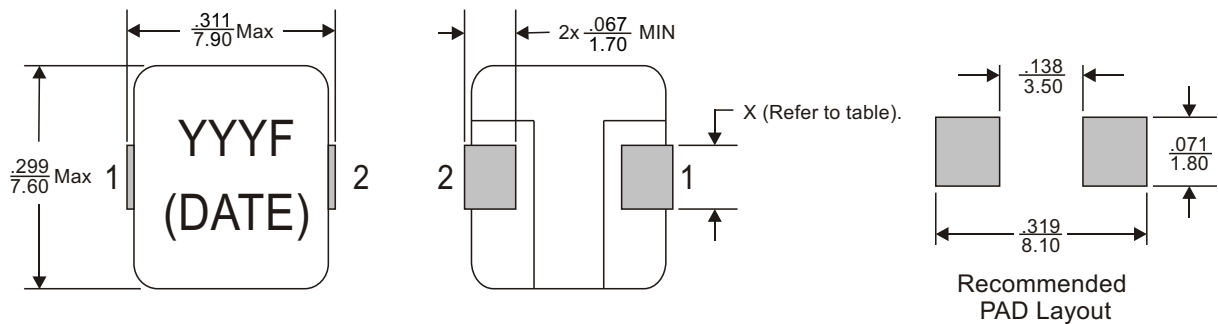
Part Number	Inductance <sup>2</sup> @0Adc ( $\pm 20\%$ )	I <sub>rated</sub> <sup>4</sup> (A)	Inductance @I <sub>rated</sub> ( $\pm 6\%$ )	DCR <sup>3</sup> (m $\Omega$ ) $\pm 6\%$	Heating Current <sup>6</sup> I <sub>dc</sub> TYP (A)	Saturation Current <sup>5</sup> I <sub>sat</sub> TYP (A)	Marking (YYYYF)
RIS7950M-401F	0.4	20.0	0.32	3.3	20	32.0	401F
RIS7950M-681F	0.68	17.5	0.54	4.3	17.5	25.0	681F
RIS7950M-102F	1.0	14.5	0.8	5.8	14.5	22.0	102F
RIS7950M-152F	1.5	13.3	1.2	6.8	13.3	18.0	152F
RIS7950M-222F	2.2	10.0	1.7	12.7	10.0	14.0	222F
RIS7950M-332F	3.3	9.5	2.6	16.6	9.5	13.0	332F
RIS7950M-472F	4.7	9.0	3.7	18.4	9.0	10.0	472F
RIS7950M-682F	6.8	6.0	5.4	26.4	6.0	8.0	682F

**Notes:**

- Ordering Information: RIS7950a - bbbFc.  
RIS7950 = Product Type.  
a = Tolerance of Inductance ( $M = \pm 20\%$ ).  
bbb = Inductance value in  $\mu\text{H}$  (i.e. 681 = 0.68 $\mu\text{H}$ ; 152 = 1.5 $\mu\text{H}$ ; 472 = 4.7 $\mu\text{H}$ ).  
F = Internal Control Code.  
c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).
- Inductance is tested at 100kHz, 100mV.
- The DCR is measured from point a to point b, as shown on the mechanical dimension.
- The rated current listed is the lower of saturation current(@25°C) or the heating current. And the inductance at I<sub>rated</sub> is a typical inductance value for the part taken at rated current.
- Saturation current will cause the inductance drop by approximate 20%(typical) of its initial value.
- Heat rating current will cause an approximate temperature change of 40°C.
- Operating temperature range: -40°C to +125°C.
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

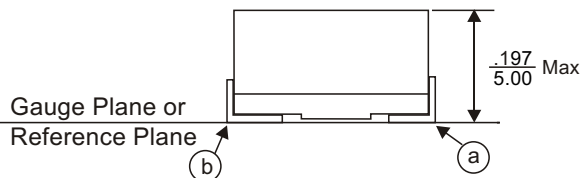


**MECHANICAL DIMENSIONS**



**Table**

P/N	X(Ref.)
RIS7950M-401F	1.2mm
RIS7950M-681F	1.2mm
RIS7950M-102F	1.1mm
RIS7950M-152F	1.1mm
RIS7950M-222F	0.8mm
RIS7950M-332F	0.7mm
RIS7950M-472F	0.7mm
RIS7950M-682F	0.7mm

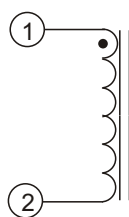


**Notes:**

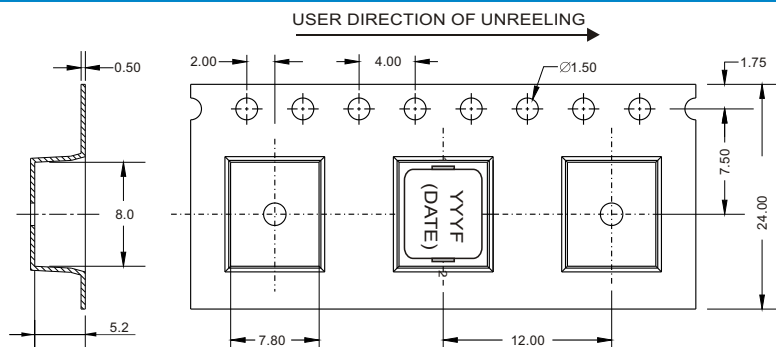
- All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
- Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 1.2 typ.
Tape & Reel	: 800 / reel

**SCHEMATIC**



**PACKAGING**



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Email: eempl@eleceltek.com

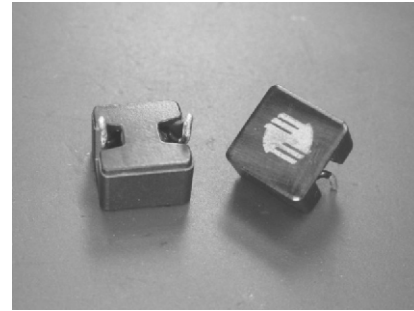
Website: <http://www.eleceltek.com> / [www.eemagnetic.com](http://www.eemagnetic.com)

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-  Used in high power application
-  Large permissible DC current
-  Ideal for computers and portable power devices, DC-DC converters, energy storage applications and Input-Output filter applications
-  Operating temperature -40 C to +125 C
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

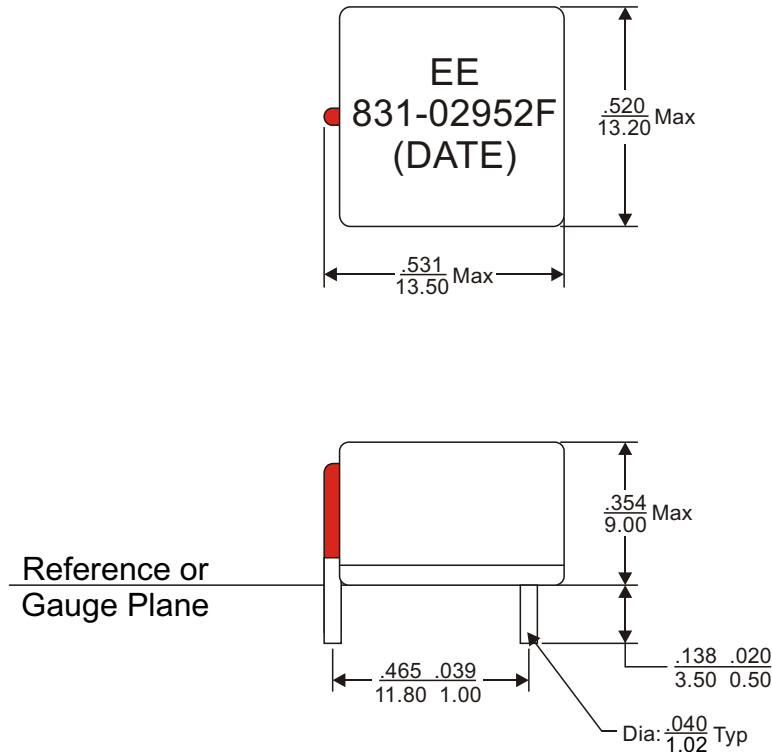
Part Number	Inductance <sup>1</sup> @0Adc ( H 20%)	Inductance @Isat	DCR (m Max)	Saturation <sup>2</sup> Current Isat(A)
831-02952F	4.60	3.2 Min	6.20	12

**Notes:**

1. Inductance is tested at 100kHz, 0.1Vrms, 0Adc.
2. Saturation current, Isat, is the DC current at which the inductance of the component drops by 20% typical at ambient temperature of 25 C.
3. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



**MECHANICAL DIMENSIONS**

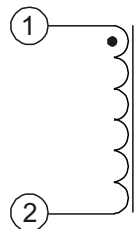


**Notes:**

4. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
5. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	:	4.0 typ.
Quantity per Tray	:	136

**SCHEMATICS**



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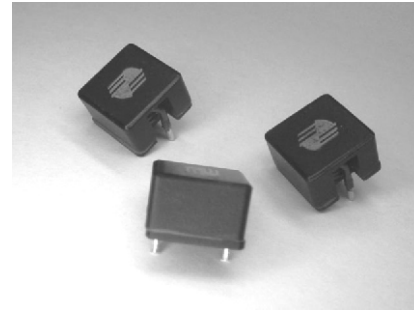
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-  Used in high power application
-  Large permissible DC current
-  Ideal for computers and portable power devices, DC-DC converters, energy storage applications and Input-Output filter applications
-  Operating temperature -40 C to +125 C
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Inductance @0Adc <sup>2</sup>		Inductance <sup>3</sup> @ Irated (uH Typ)	Irated <sup>4</sup> (A)	DCR (m Ω) Max	Saturation <sup>5</sup> Current Isat (A)	Heating <sup>6</sup> Current Idc (A)	Dia of Pins Ref. (in./mm)	Marking (XXXXY)
	(uH)	Tolerances (%)							
RIT1180A-151LF	0.15	±15	0.14	38.7	0.80	50	38.7	.063/1.60	151L
RIT1180A-281LF	0.28	±15	0.25	38.7	0.80	45	38.7	.063/1.60	281L
RIT1180A-351LF	0.35	±15	0.32	25.5	1.85	45	25.5	.051/1.30	351L
RIT1180A-451LF	0.45	±15	0.41	25.5	1.85	35	25.5	.051/1.30	451L
RIT1180A-601LF	0.60	±15	0.54	20.2	2.80	35	20.2	.043/1.10	601L
RIT1180A-801LF	0.80	±15	0.72	20.2	2.80	25	20.2	.043/1.10	801L
RIT1180A-102LF	1.00	±15	0.90	16.5	4.10	20	16.5	.039/1.00	102L
RIT1180A-132LF	1.30	±15	1.17	16.5	4.10	20	16.5	.039/1.00	132L
RIT1180A-152LF	1.50	±15	1.35	15.3	4.80	18	15.3	.039/1.00	152L
RIT1180A-182LF	1.80	±15	1.62	15.3	4.80	18	15.3	.039/1.00	182L
RIT1180A-222LF	2.20	±15	1.98	14.0	5.50	16	14.0	.039/1.00	222L
RIT1180A-252LF	2.50	±15	2.25	14.0	5.50	16	14.0	.039/1.00	252L

**Notes:**

1. Ordering Information: RIT1180A - bbbaFc.

RIT1180A = Product Type.

a = Tolerance of Inductance (L = ± 15%).

bbb = Inductance value in uH (i.e. 151 = 0.15uH; 152 = 1.50uH).

F = Internal Control Code.

c = Packaging Code (No code = Non Tape & Reel Packaging, i.e. Tray packaging).

2. Inductance is tested at 0.1Vrms, 100kHz @ 0Adc.

3. Inductance at Irated is a typical inductance value for the component taken at rated current.

4. The rated current listed is the lower of the saturation current @ 25°C or the heating current.

5. Saturation current, Isat, indicates the value of DC current when the inductance is 10% (typical) lower than its initial value at an ambient temperature of 25°C.

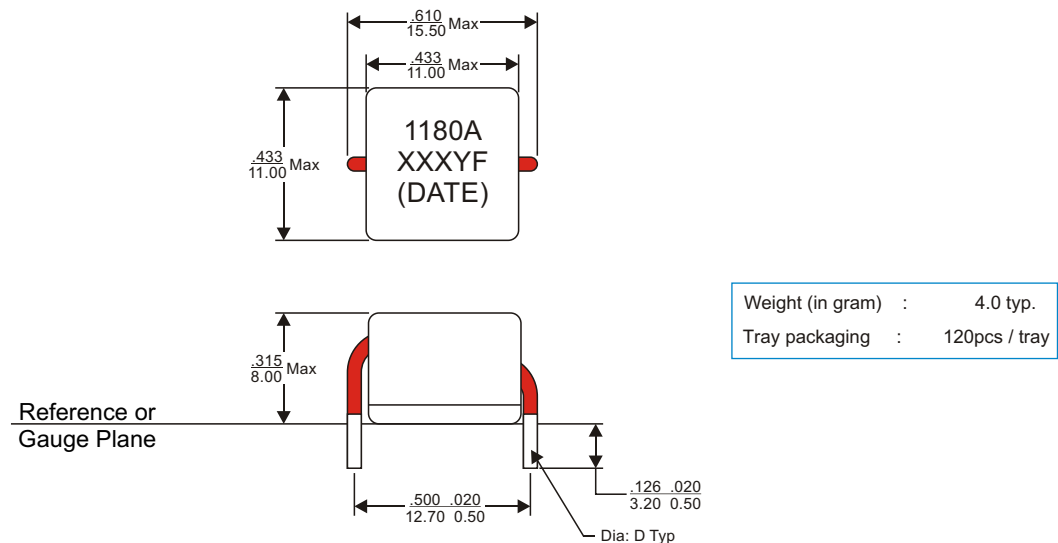
6. Heating current, Idc, is the current required to raise the component temperature by approximately 40°C. The heating current is determined by mounting the component on a typical PCB and applying current for 30 minutes.

7. Operating temperature range: -40°C to +125°C.

8. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



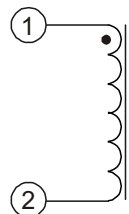
**MECHANICAL DIMENSIONS**



**Notes:**

9. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
10. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

**SCHEMATIC**



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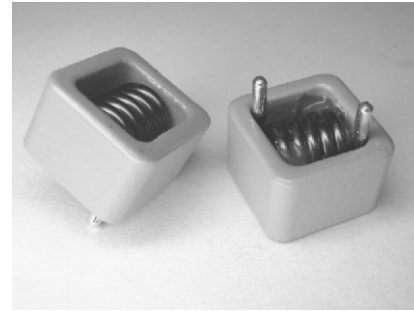
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-  Used in high power application
-  Large permissible DC current
-  Ideal for computers and portable power devices, DC-DC converters, energy storage applications and Input-Output filter applications
-  Operating temperature -40 C to +130 C
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Inductance @I <sub>rated</sub> ( H) Typ	I <sub>rated</sub> <sup>3</sup> (A)	DCR (m 8%)	Inductance <sup>2</sup> @0Adc ( H 15%)	Saturation <sup>4</sup> Current Isat (A)	Heating <sup>5</sup> Current Idc(A)	Marking (XXXY)
RIT1295A-281LF	0.25	50	0.47	0.28	50	50	281L
RIT1295A-451LF	0.41	40	0.96	0.45	47	40	451L
RIT1295A-601LF	0.54	40	0.96	0.60	40	40	601L
RIT1295A-801LF	0.72	37	1.25	0.80	37	37	801L
RIT1295A-122LF	1.10	30	1.55	1.20	30	31	122L

**Notes:**

1. Ordering Information: RIT1295A - bbbaFc.

RIT1295A = Product Type.

a = Tolerance of Inductance (L = ±15%).

bbb = Inductance value in uH (i.e. 281 = 0.28uH; 122 = 1.20uH).

F = Internal Control Code.

c = Packaging Code (No code = Non Tape & Reel Packaging, i.e. Tray packaging).

2. Inductance is tested at 100kHz, 0.1Vrms, 0Adc.

3. The rated current listed is the lower of the saturation current at 25°C or the heating current.

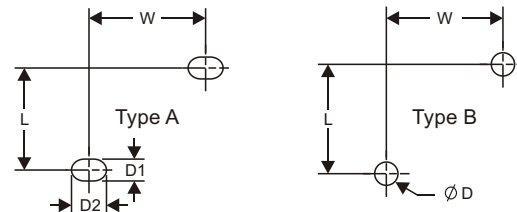
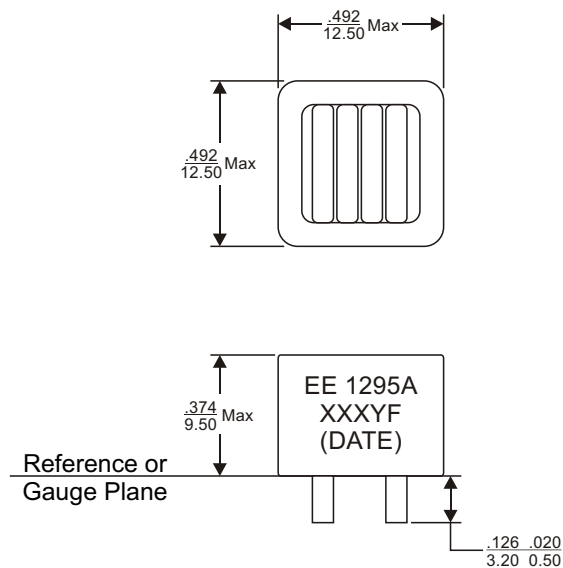
4. Saturation current, Isat, is the DC current at which the inductance of the component drops by 10% typical at an ambient temperature of 25 C.

5. Heating current, IDC, is the current required to raise the component temperature by approximately 40°C. The heating current is determined by mounting the component on a typical PCB and applying current for 30 minutes.

6. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



**MECHANICAL DIMENSIONS**



**Recommended  
PAD Layout**

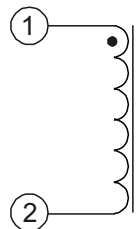
EE Part Number	Layout Type	L .039 1.00	W .039 1.00	D Max	D1 Max	D2 Max
RIT1295A-281LF	A	.250/6.35	.211/5.35	-	.075/1.90	.114/2.90
RIT1295A-451LF	A	.250/6.35	.236/6.00	-	.059/1.50	.094/2.40
RIT1295A-601LF	A	.250/6.35	.236/6.00	-	.059/1.50	.094/2.40
RIT1295A-801LF	B	.250/6.35	.236/6.00	.063/1.60	-	-
RIT1295A-122LF	B	.250/6.35	.256/6.50	.063/1.60	-	-

**Notes:**

- All dimensions are specified in inches with higher precedence in mm.
- Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	:	8.2 typ.
Tray packaging	:	176pcs/tray

**SCHEMATICS**



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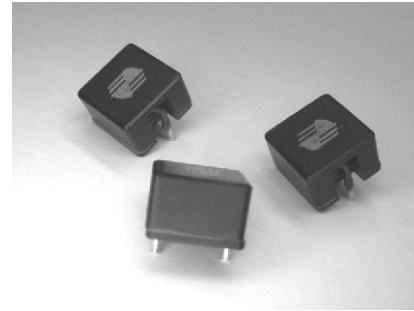
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-  Used in high power application
-  Large permissible DC current
-  Ideal for computers and portable power devices, DC-DC converters, energy storage applications and Input-Output filter applications
-  Operating temperature -40 C to +125 C
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Inductance @0Adc <sup>2</sup>		Inductance <sup>3</sup> @ Irated (uH Typ)	Irated <sup>4</sup> (A)	DCR (m ) Typ	DCR (m ) Max	Saturation <sup>5</sup> Current Isat (A)	Heating <sup>6</sup> Current Idc (A)	Marking (XXXY)
	(uH)	Tolerances (%)							
RIT1392A-221MF	0.22	±20	0.21	45	0.45	0.60	60	45	221M
RIT1392A-351MF	0.35	±20	0.32	45	0.45	0.60	55	45	351M
RIT1392A-451MF	0.45	±20	0.43	29	1.10	1.45	50	29	451M
RIT1392A-601MF	0.60	±20	0.57	29	1.10	1.45	45	29	601M
RIT1392A-801MF	0.80	±20	0.76	23	2.10	2.40	44	23	801M
RIT1392A-102MF	1.00	±20	0.88	23	2.10	2.40	35	23	102M
RIT1392A-132MF	1.30	±20	1.23	19	2.55	3.00	34	19	132M
RIT1392A-152MF	1.50	±20	1.42	19	2.55	3.00	25	19	152M
RIT1392A-182MF	1.80	±20	1.60	19	2.55	3.00	20	19	182M

**Notes:**

1. Ordering Information: RIT1392A - bbbaFc.

RIT1392A = Product Type.

a = Tolerance of Inductance (M = ± 20%).

bbb = Inductance value in uH (i.e. 351 = 0.35uH; 152 = 1.50uH).

F = Internal Control Code.

c = Packaging Code (No code = Non Tape & Reel Packaging, i.e. Tray packaging).

2. Inductance is tested at 0.1Vrms, 100kHz @ 0Adc.

3. Inductance at Irated is a typical inductance value for the component taken at rated current.

4. The rated current listed is the lower of the saturation current @ 25°C or the heating current.

5. Saturation current, Isat, indicates the value of DC current when the inductance is 15% (typical) lower than its initial value at an ambient temperature of 25°C.

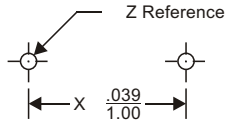
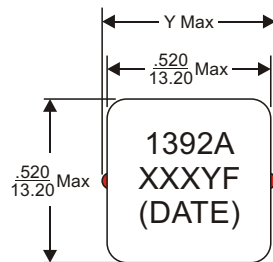
6. Heating current, Idc, is the current required to raise the component temperature by approximately 40°C. The heating current is determined by mounting the component on a typical PCB and applying current for 30 minutes.

7. Operating temperature range: -40°C to +125°C.

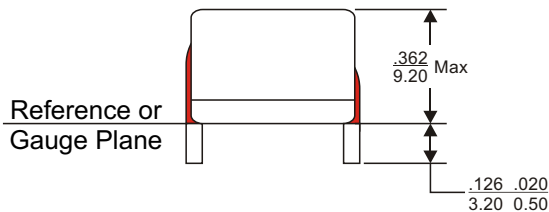
8. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



**MECHANICAL DIMENSIONS**



**Recommended Pad Layout**



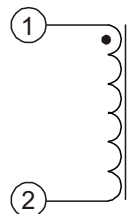
E&E Part Number	X (in./mm)	Y (in./mm)	Z (in./mm)
RIT1392A-221MF	.492/12.50	.630/16.00	.087/2.20
RIT1392A-351MF	.492/12.50	.630/16.00	.087/2.20
RIT1392A-451MF	.500/12.70	.618/15.70	.063/1.60
RIT1392A-601MF	.500/12.70	.618/15.70	.063/1.60
RIT1392A-801MF	.394/10.00	.512/13.00	.051/1.30
RIT1392A-102MF	.394/10.00	.512/13.00	.051/1.30
RIT1392A-132MF	.433/11.00	.551/14.00	.051/1.30
RIT1392A-152MF	.433/11.00	.551/14.00	.051/1.30
RIT1392A-182MF	.433/11.00	.551/14.00	.051/1.30

Weight (in gram) :	7.2 typ.
Tray packaging :	130pcs / tray

**Notes:**

9. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
10. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

**SCHEMATIC**



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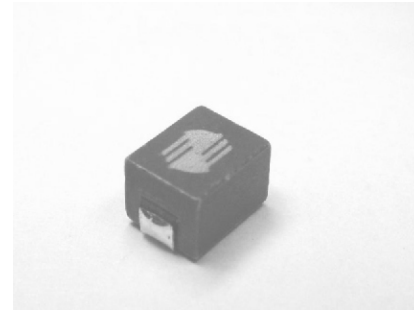
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- Miniature in size and exceptionally low DC resistance
- Ideal for high current requirements of notebook, mobile phones, and other handheld products
- Custom inductance value or tolerance is available
- RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

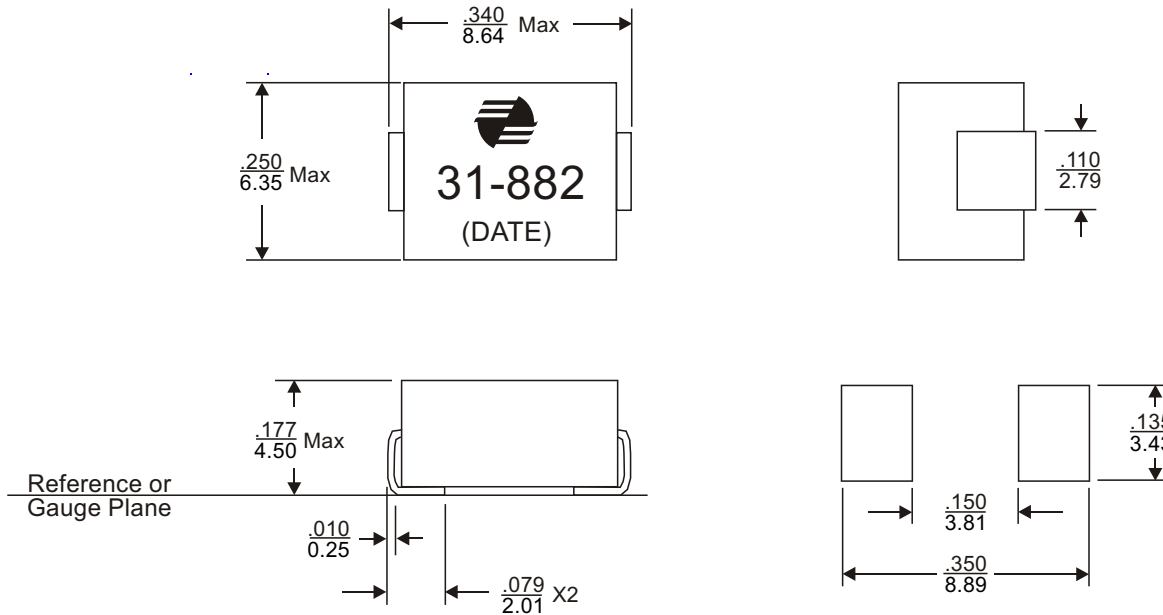
Part Number	Inductance <sup>1</sup> (nH±20%)	Inductance@Irated <sup>2</sup> (nH±20%)	DCR (m Max)	Saturation Current <sup>3</sup> (Adc)	Heating Current <sup>4</sup> (A)
831-00882F	200	190	0.56	16.8	15.0

**Notes:**

- Inductance is tested at 100mVrms, 1MHz.
- The rated current is either the saturation current or the heating current depending on which value is lower. In this case, the rated current is 15A.
- Saturation current, Isat, indicates the value of DC current when the inductance is 10% typical lower than its initial value.
- Heating current, Irms, is the value of current when the temperature rising T=30°C typical.
- Operating temperature range: -40°C to +125°C.
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



MECHANICAL DIMENSIONS



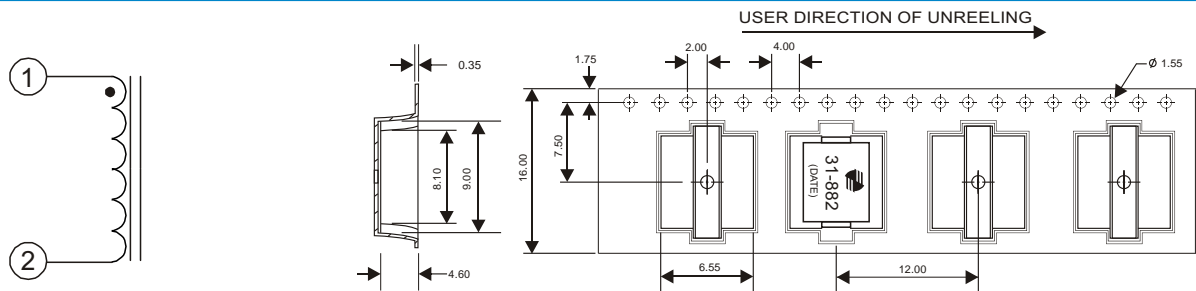
Notes:

7. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in inches.
8. Unless otherwise specified, all tolerances are  $\pm \frac{0.10}{0.25}$ .

Weight (in gram)	: 1.0 typ.
Tape & Reel	: 1000 / reel

SCHEMATIC

PACKAGING



FOR MORE INFORMATION, PLEASE CONTACT

HEADQUARTER

1/F., Harbour View 1, No.12 Science Park East Avenue,  
Phase II, Hong Kong Science Park, Shatin, N.T.  
Hong Kong

Tel: (852) 2954 3333 Fax: (852) 2954 3304

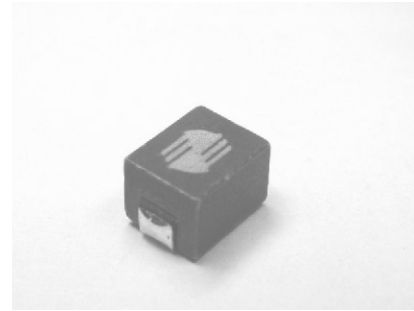
Email: eempl@eleceltek.com

Website: <http://www.eleceltek.com> / [www.eemagnetic.com](http://www.eemagnetic.com)

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- Miniature in size and exceptionally low DC resistance
- Ideal for high current requirements of notebook, mobile phones, and other handheld products
- Custom inductance value or tolerance is available
- RoHS compliant



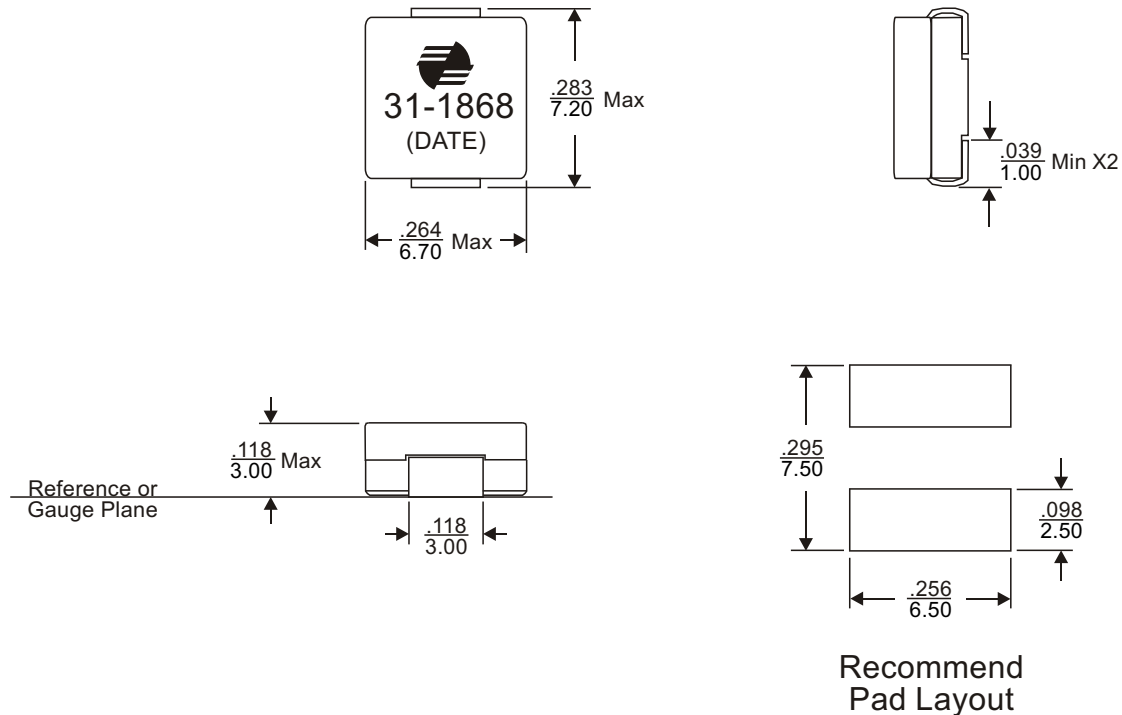
ELECTRICAL SPECIFICATION @ 25°C				
Part Number	Inductance <sup>1</sup> ( $\mu\text{H} \pm 20\%$ )	DCR (m Max)	Saturation Current <sup>2</sup> (Adc)	Heating Current <sup>3</sup> (A)
831-01868F	0.047	0.24	42	39

Notes:

- Inductance is tested at 0.25Vrms, 1MHz.
- Saturation current, Isat, indicates the value of DC current when the inductance is 30% typical lower than its initial value.
- Heating current, Irms, is the value of current when the temperature rising  $T=40^\circ\text{C}$  typical.
- Operating temperature range:  $-40^\circ\text{C}$  to  $+125^\circ\text{C}$ .
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



MECHANICAL DIMENSIONS



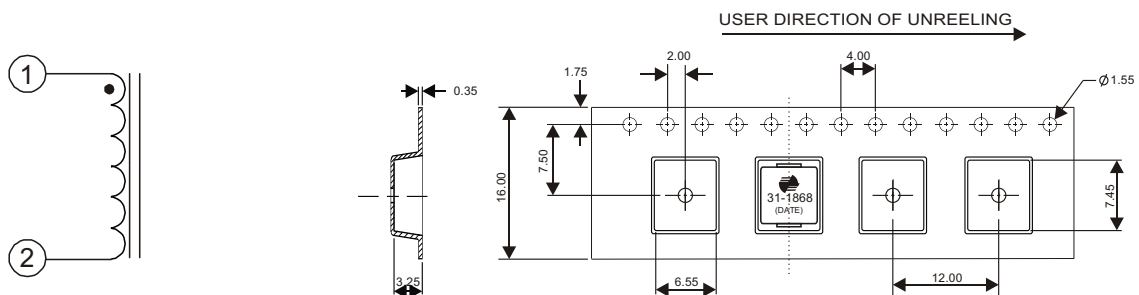
Notes:

- All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
- Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 0.8 typ.
Tape & Reel	: 1600 / reel

SCHEMATIC

PACKAGING



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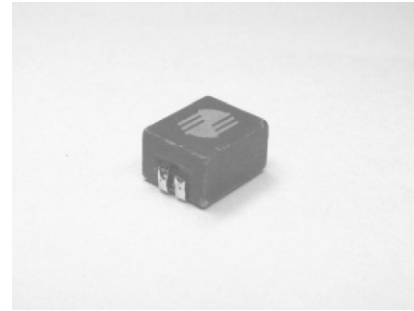
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-  Miniature in size and exceptionally low DC resistance
-  Ideal for high current requirements of notebook, mobile phones, and other handheld products
-  Custom inductance value or tolerance is available
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

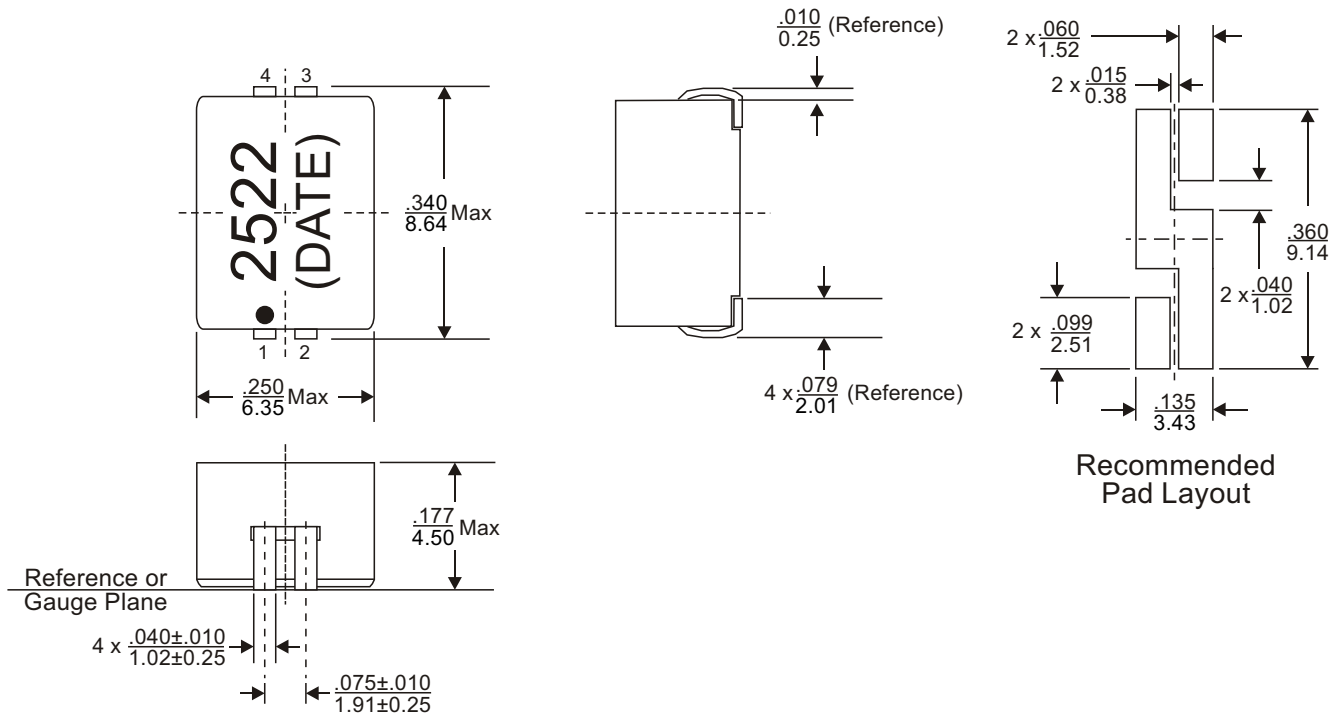
Part Number	Inductance <sup>1</sup> (nH±20%)	Inductance@Irated <sup>2</sup> (nH±20%)	DCR (m Max)	Saturation Current <sup>3</sup> (Adc)	Heating Current <sup>4</sup> (A)
831-02522F	700	600	2.53	12.6	10.7

**Notes:**

1. Inductance is tested at 0.1Vrms, 100kHz.
2. The rated current is either 85% of the saturation current or the heating current depending on which value is lower. In this case, the rated current is 10.7A.
3. Saturation current, Isat, indicates the value of DC current when the inductance is 30% typical lower than its initial value.
4. Heating current, Irms, is the value of current when the temperature rising T=40°C typical.
5. Operating temperature range: -40°C to +125°C.
6. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



MECHANICAL DIMENSIONS

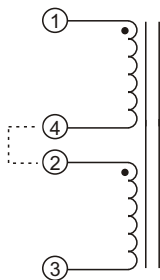


Notes:

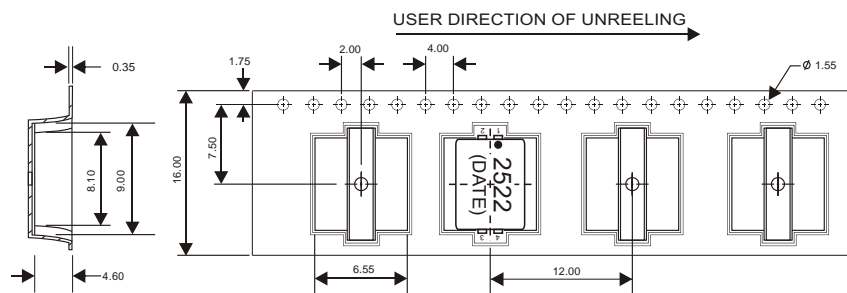
7. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
8. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 1.0 typ.
Tape & Reel	: 1000 / reel

SCHEMATIC



PACKAGING



FOR MORE INFORMATION, PLEASE CONTACT

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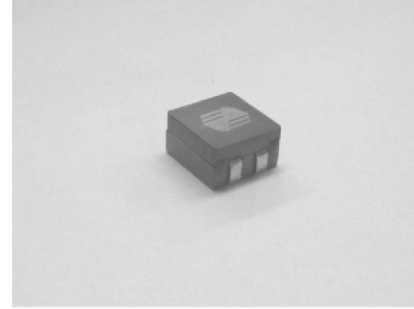
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-  Two independent inductors integrated into a single package
-  Ideal for high current devices
-  Ideal for multi-phase and single phase applications
-  Custom design is also available
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

**Dual Phase Integrated Inductor Specifications for Multi-phase Systems**

Part Number	Inductance@Irated <sup>2</sup> (nH Typ)		Irated <sup>3</sup> (Adc)		DCR/phase <sup>1</sup> (m Max)		Inductance <sup>2</sup> (nH±20%)		Saturation Current <sup>4</sup> (Adc)		Heating Current <sup>5</sup> (Adc)		Marking XXXXF
	L1	L2	L1	L2	L1	L2	L1	L2	L1	L2	L1	L2	
831-02958F	285	285	26	26	0.90	0.90	296	296	38	38	26	26	2958F
831-02959F	325	325	26	26			352	352	31.5	31.5			2959F
831-02960F	395	395	25	25			435	435	25	25			2960F
831-02961F	495	495	18.5	18.5			568	568	18.5	18.5			2961F

**Single Phase Inductor Specifications for Parallel and Series Connections**

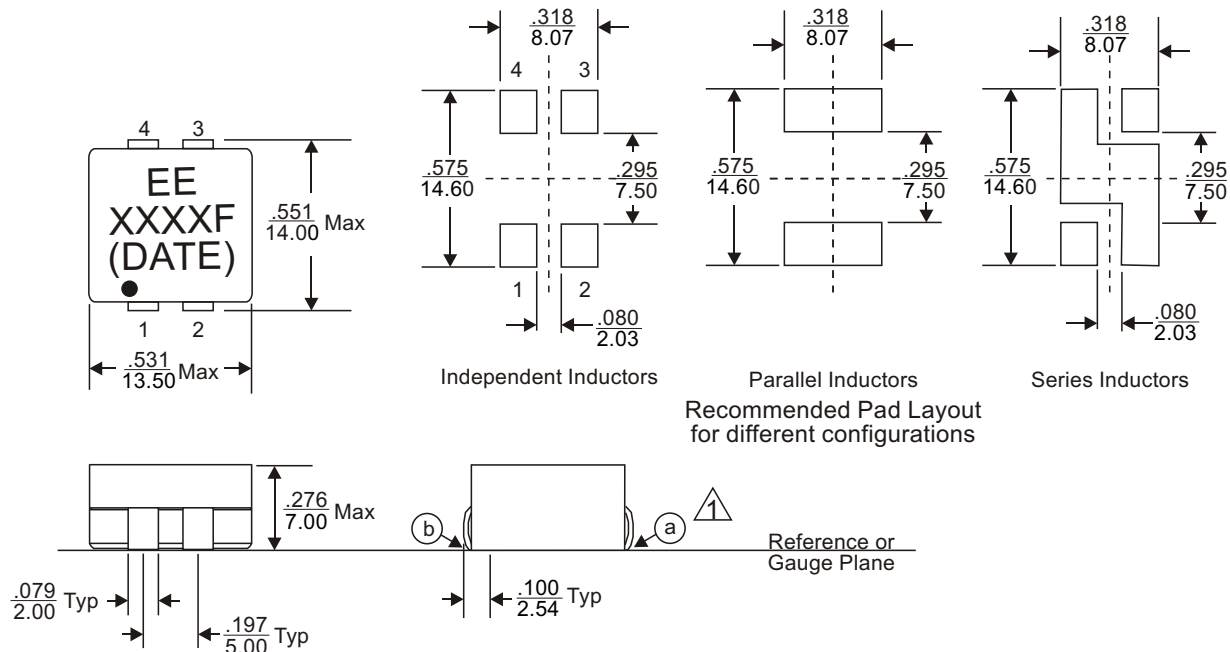
Part Number	Inductance@Irated <sup>2</sup> (nH Typ)	Irated <sup>3</sup> (Adc)	DCR <sup>1</sup> (m Max)	Inductance <sup>2</sup> (nH±20%)	Saturation Current <sup>4</sup> (Adc)	Heating Current <sup>5</sup> (Adc)	Connection
831-02958F	148	52	0.45	148	76	52	Parallel
831-02959F	160	52		176	63		
831-02960F	180	50		218	50		
831-02961F	240	37		284	37		
831-02958F	635	26	1.80	592	38	26	Series
831-02959F	700	26		704	31.5		
831-02960F	770	25		870	25		
831-02961F	1000	18.5		1140	18.5		

**Notes:**

- The DCR is measured from point a to point b, as shown on the mechanical drawing.
- Inductance is tested at 0.1Vrms, 1MHz.
- The rated current as listed is either the saturation current or the heating current depending on which value is lower.
- The saturation current, Isat, is the current at which the inductance of the component drops by 26% typical at an ambient temperature of 25°C.
- The heating current is the DC current required to raise the component temperature by approximately 40°C at ambient temperature of 25°C. The heating current of independent inductors are 26A each. For parallel connection, the heating current of this part is 52A. For series connection, the heating current of this part is 26A.
- Operating temperature range: -40°C to +130°C. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperatures should be verified in the end application.



**MECHANICAL DIMENSIONS**

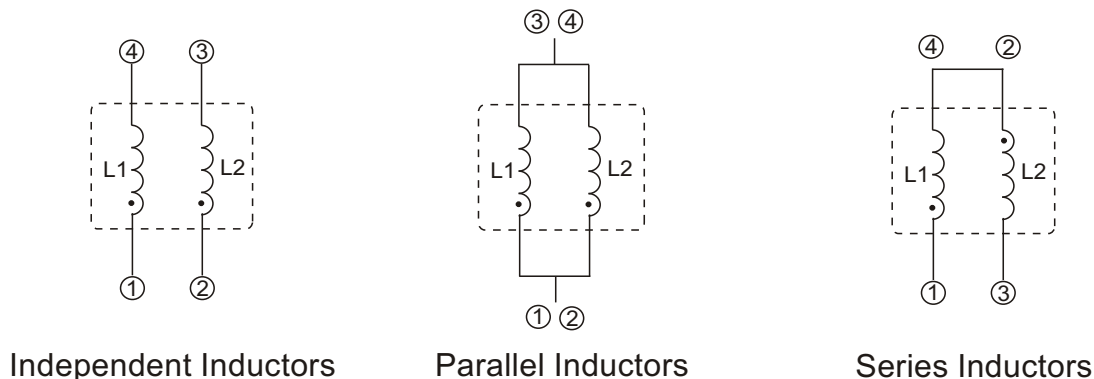


**Notes:**

7. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
8. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 5.2 typ.
Tape & Reel	: 350 / reel

**SCHEMATICS**



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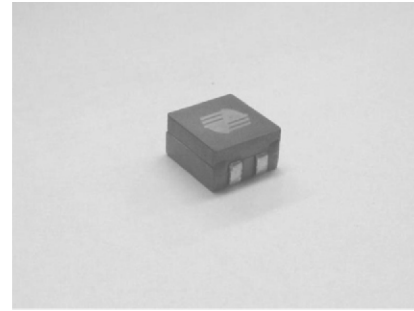
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-  Available in low profile and used in high power application
-  Ideal for high current devices
-  Ideal for multi-phase and single phase applications
-  Custom design is also available
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

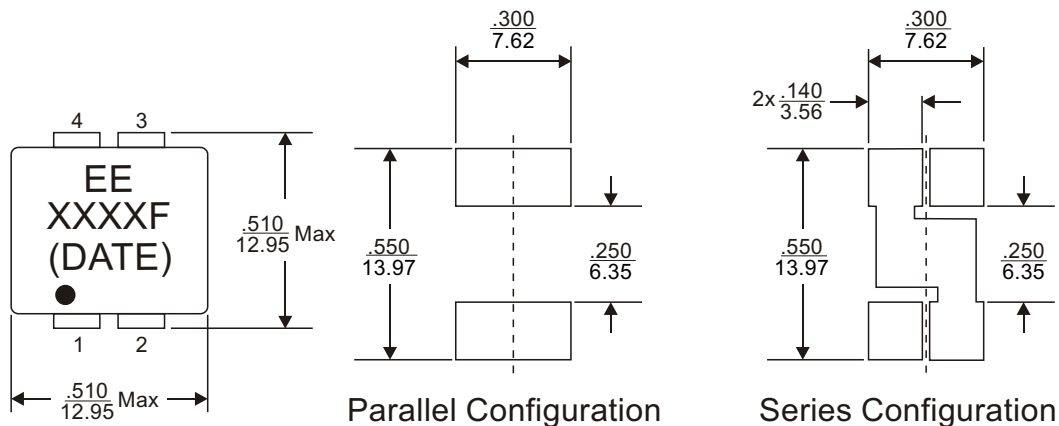
Part Number	Inductance @I <sub>rated</sub> (nH Typ)	I <sub>rated</sub> (A <sub>dc</sub> )	DCR <sup>1</sup> (mΩ)		Inductance (nH±20%)	Saturation Current <sup>4</sup> (A <sub>dc</sub> )		Heating Current <sup>5</sup> (A <sub>dc</sub> )	Connection	Marking XXXXF
			Typ	Max		25°C	125°C			
831-02962F	74	40	0.18	0.225	82.5	40	40	40	Parallel	2962F
831-02963F	105	40	0.18	0.225	118	40	40	40	Parallel	2963F
831-02964F	153	34	0.18	0.225	170	40	34	40	Parallel	2964F
831-02965F	225	24	0.18	0.225	250	35	24	40	Parallel	2965F
831-02962F	297	20	0.74	0.9	330	40	32	20	Series	2962F
831-02963F	423	20	0.74	0.9	470	37	26	20	Series	2963F
831-02964F	612	19	0.74	0.9	680	25	19	20	Series	2964F
831-02965F	900	14	0.74	0.9	1000	18	14	20	Series	2965F

**Notes:**

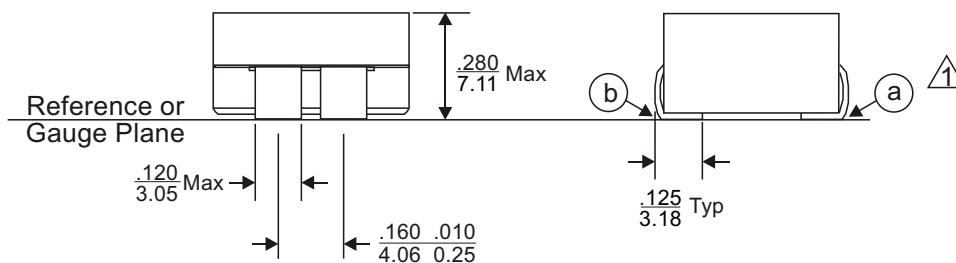
- The DCR is measured from point a to point b, as shown on the mechanical drawing.
- Inductance is tested at 0.1Vrms, 1MHz.
- The rated current as listed is either the saturation current or the heating current depending on which value is lower.
- The saturation current, I<sub>sat</sub>, is the current at which the inductance of the component drops by 10% typical at an ambient temperature of 25°C.
- The heating current is the DC current required to raise the component temperature by approximately 40°C at ambient temperature of 25°C. For parallel connection, the heating current of this part is 40A. For series connection, the heating current of this part is 20A.
- Operating temperature range: -40°C to +130°C. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperatures should be verified in the end application.



MECHANICAL DIMENSIONS



Recommended Pad Layout  
for different configurations



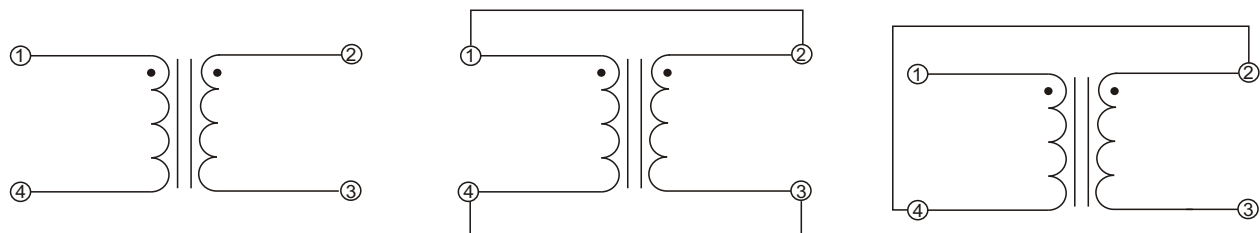
Notes:

7. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.

8. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 4.20 typ.
Tape & Reel	: 350 / reel

SCHEMATICS



DUAL INDUCTOR CONNECTION

PARALLEL CONNECTION

SERIES CONNECTION

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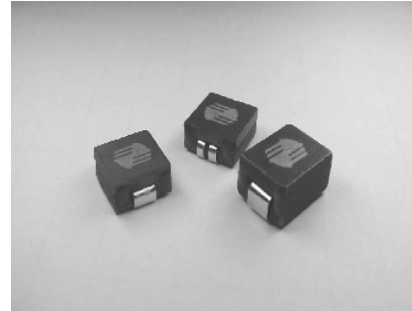
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-  Available in low profile and used in high power application
-  Ideal for high current devices
-  Custom inductance value or tolerance is available
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

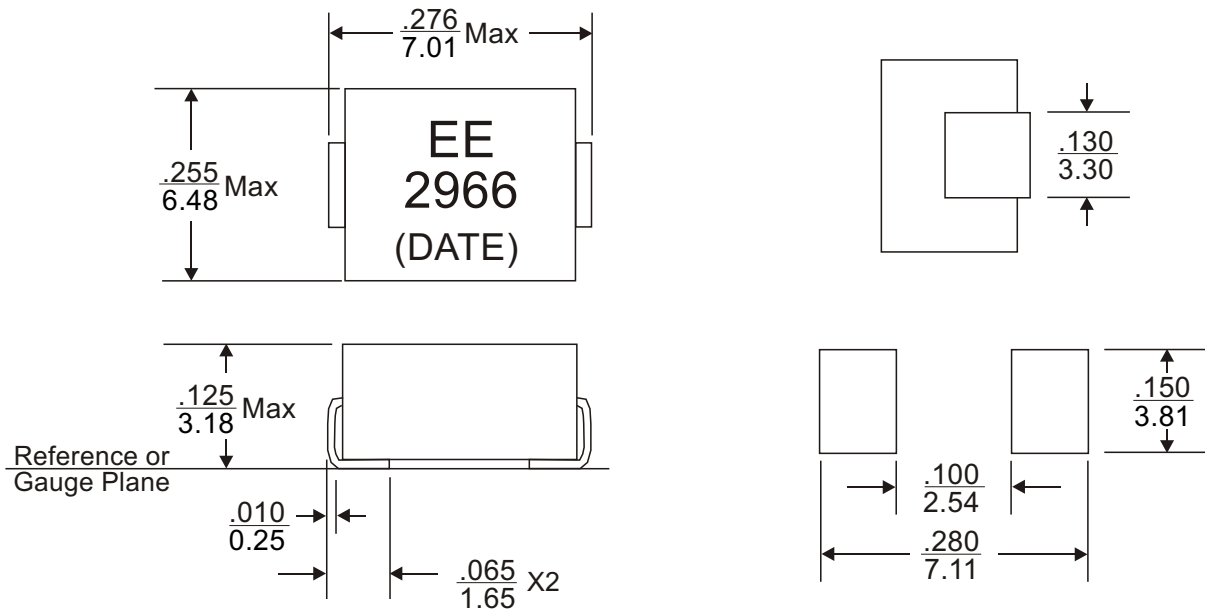
Part Number	Inductance <sup>2</sup> (nH±20%)	Inductance@I <sub>rated</sub> (nH±20%)	I <sub>rated</sub> (Adc) <sup>3</sup>	DCR <sup>1</sup> (m    Max)		Saturation Current <sup>4</sup> (Adc)		Heating Current <sup>5</sup> (A)	Marking
				Typ	Max	25°C	100°C		
831-02966F	100	95	15	0.31	0.39	18	16.2	15	2966
831-02968F	100	92	16	0.68	0.8	36	30	16	2968
831-02969F	150	142.5	15	0.45	0.56	18	16.2	15	2969
831-02970F	200	190	15	0.45	0.56	16.8	15.1	15	2970
831-02971F	700	600	10.7	2.3	2.53	12.6	8.0	12	2971

**Notes:**

1. The DCR is measured from point a to point b, as shown on the mechanical drawing.
2. Inductance is tested at 0.1Vrms, 1MHz.
3. The rated current as listed is either the saturation current or the heating current depending on which value is lower.
4. The saturation current, Isat, is the current at which the inductance of the component drops by 10% typical at the stated ambient temperatures (25°C and 100°C).
5. The heating current is the DC current required to raise the component temperature by approximately 30°C at ambient temperature of 25°C. This current is determined by soldering the component on a typical application PCB, and then applying the current to the device for 30 minutes.
6. Operating temperature range: -40°C to +125°C. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperatures should be verified in the end application.



MECHANICAL DIMENSIONS



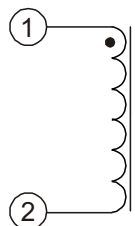
Recommend  
Pad Layout

Notes:

7. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
8. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 0.50 typ.
Tape & Reel	: 1500 / reel

SCHEMATICS



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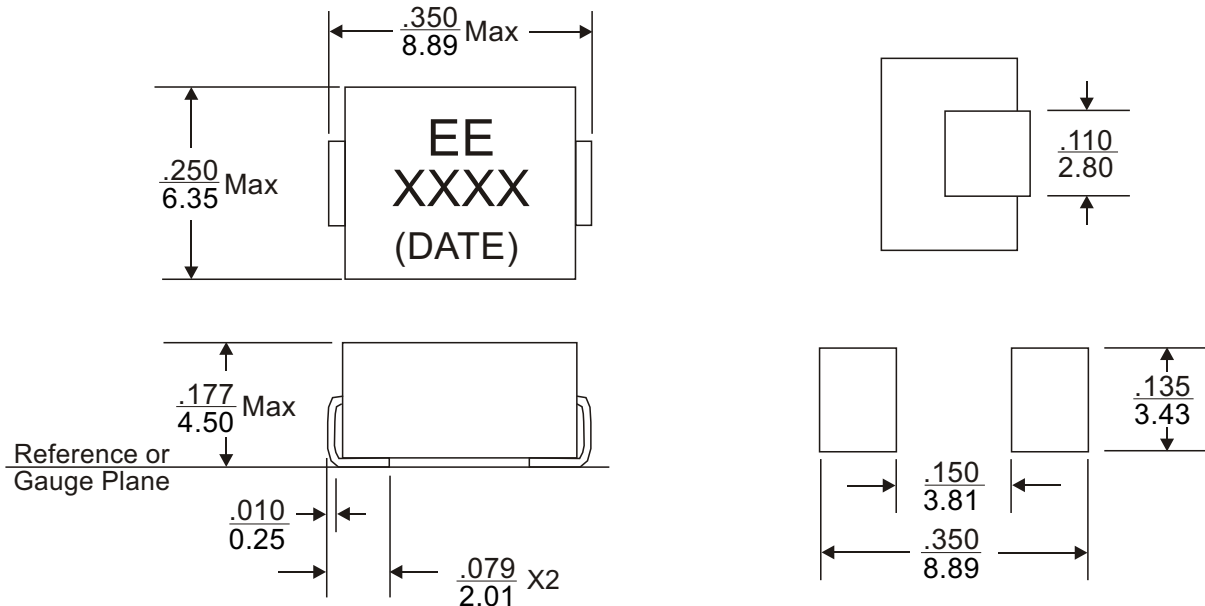
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MECHANICAL DIMENSIONS

For 831-02968F, -2969F, 2970F



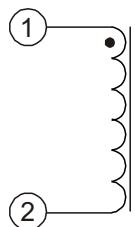
Recommend  
Pad Layout

Notes:

7. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
8. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 1.0 typ.
Tape & Reel	: 1000 / reel

SCHEMATICS



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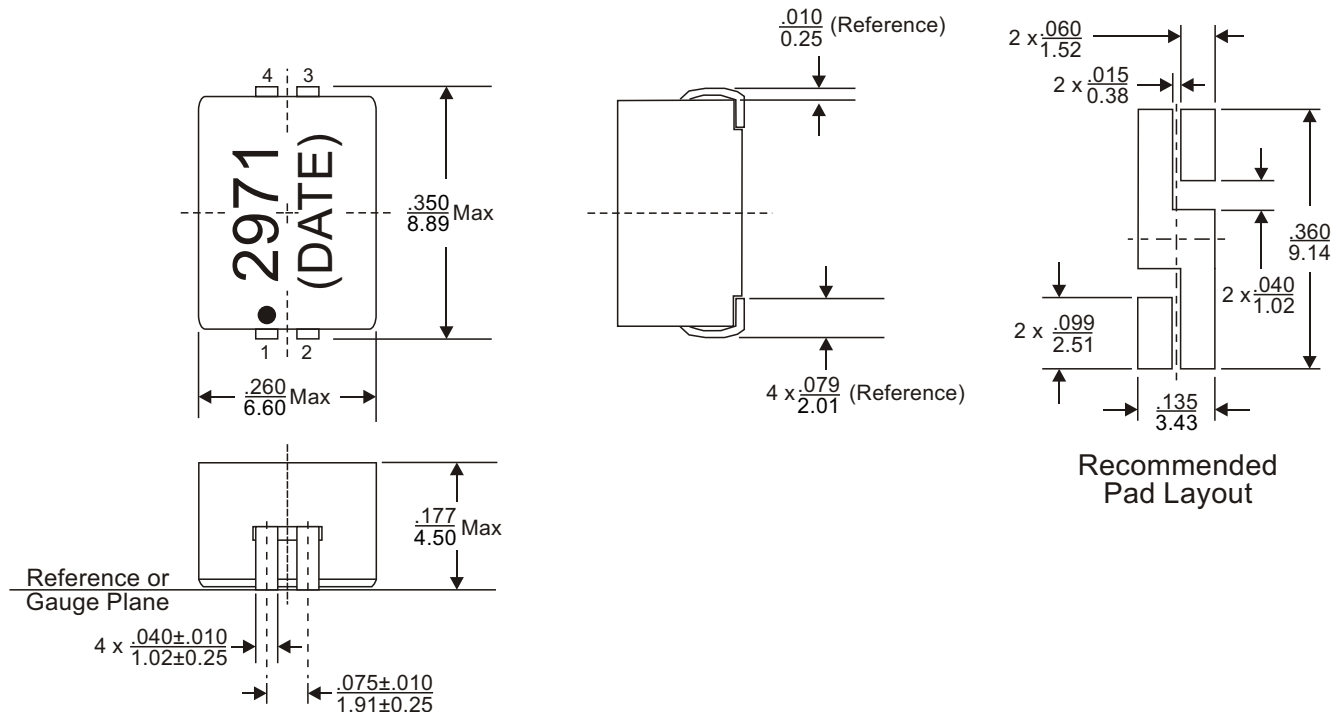
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MECHANICAL DIMENSIONS

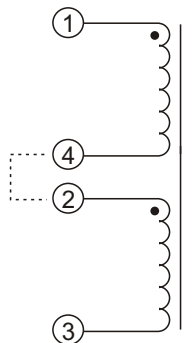


Notes:

7. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
8. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 1.0 typ.
Tape & Reel	: 1000 / reel

SCHEMATICS



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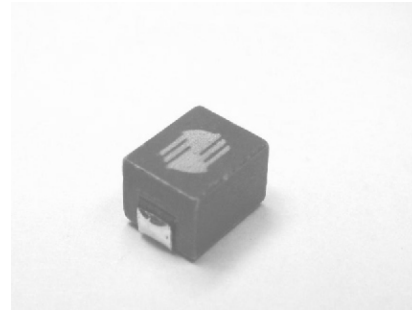
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-  Used in high power application
-  Ideal for high current devices
-  Ideal for computers and portable power devices, DC-DC converters, energy storage applications and Input-Output filter applications
-  Custom design is also available
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

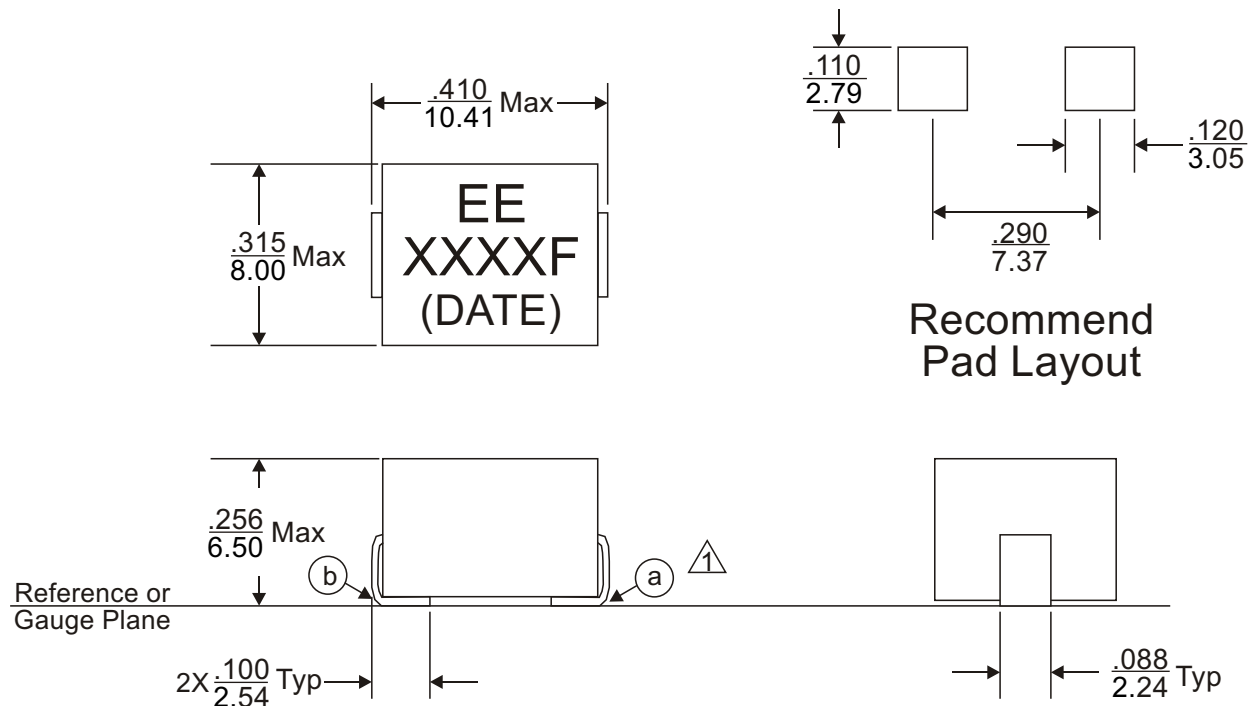
Part Number	Inductance <sup>2</sup> (nH±20%)	Inductance@Irated (nH Typ)	Irated <sup>3</sup> (Adc)	DCR <sup>1</sup> (mΩ)	Saturation Current <sup>4</sup> (Adc)		Heating Current <sup>5</sup> (A)	Marking XXXXF
					25°C	100°C		
831-02972F	120	120	40	0.48±8%	74	65	40	2972F
831-03046F	140	140	40	0.48±8%	66	52	40	3046F
831-02973F	180	174	40	0.48±8%	52	44	40	2973F
831-02974F	215	185	40	0.48±8%	43	39	40	2974F
831-02975F	310	250	30	0.48±8%	30	26	40	2975F

**Notes:**

1. The DCR is measured from point a to point b, as shown on the mechanical drawing.
2. Inductance is tested at 0.1Vrms, 1MHz.
3. The rated current as listed is either the saturation current or the heating current depending on which value is lower.
4. The saturation current, Isat, is the current at which the inductance of the component drops by 20% typical at the stated ambient temperatures (25°C and 100°C).
5. The heating current is the DC current required to raise the component temperature by approximately 40°C at ambient temperature of 25°C. This current is determined by soldering the component on a typical application PCB, and then applying the current to the device for 30 minutes with 25LFM of forced air cooling.
6. Operating temperature range: -40°C to +130°C. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperatures should be verified in the end application.



MECHANICAL DIMENSIONS

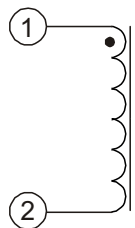


Notes:

7. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
8. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 2.0 typ.
Tape & Reel	: 700 / reel

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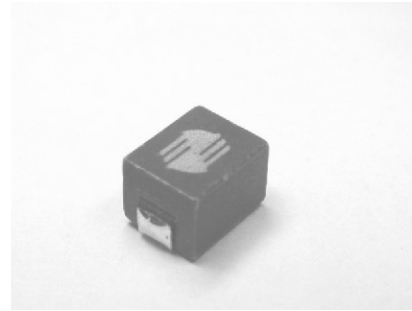
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-  Custom design is also available
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

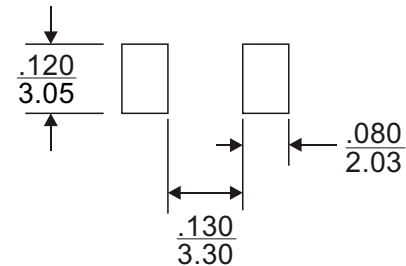
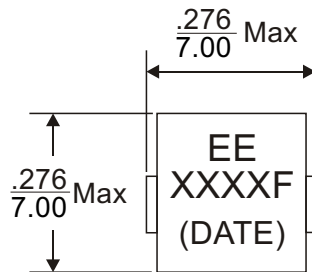
Part Number	Inductance <sup>2</sup> (nH±20%)	Inductance@Irated (nH Typ)	Irated <sup>3</sup> (Adc)	DCR <sup>1</sup> (m Ω)	Saturation Current <sup>4</sup> (Adc)		Heating Current <sup>5</sup> (A)	Marking XXXXF
					25°C	100°C		
831-02976F	72	72	31	0.32±9.4%	58	45	31	2976F
831-02977F	105	102	31	0.32±9.4%	46	38	31	2977F
831-02978F	150	134	24	0.32±9.4%	30	24	31	2978F
831-03081F	72	72	31	0.46±6.5%	58	45	31	3081F
831-03082F	105	102	31	0.46±6.5%	46	38	31	3082F
831-03083F	150	134	24	0.46±6.5%	30	24	31	3083F

**Notes:**

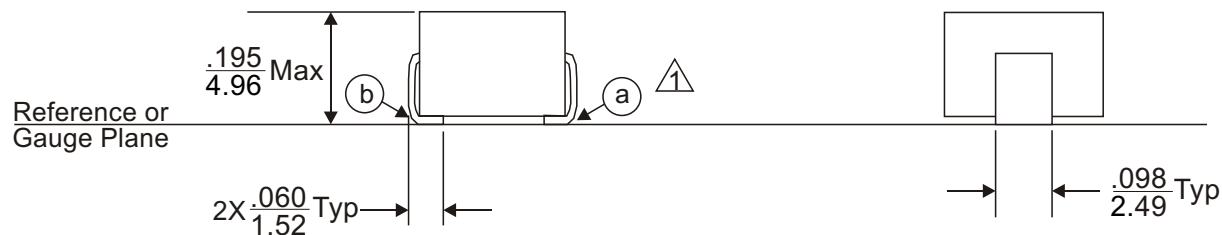
- The DCR is measured from point a to point b, as shown on the mechanical drawing.
- Inductance is tested at 0.1Vrms, 1MHz.
- The rated current as listed is either the saturation current or the heating current depending on which value is lower.
- The saturation current, Isat, is the current at which the inductance of the component drops by 20% typical at the stated ambient temperatures (25°C and 100°C).
- The heating current is the DC current required to raise the component temperature by approximately 40°C at ambient temperature of 25°C. This current is determined by soldering the component on a typical application PCB, and then applying the current to the device for 30 minutes without any forced air cooling.
- Operating temperature range: -40°C to +130°C. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperatures should be verified in the end application.



MECHANICAL DIMENSIONS



Recommend  
Pad Layout

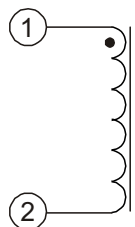


Notes:

7. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
8. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 1.0 typ.
Tape & Reel	: 950 / reel

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-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

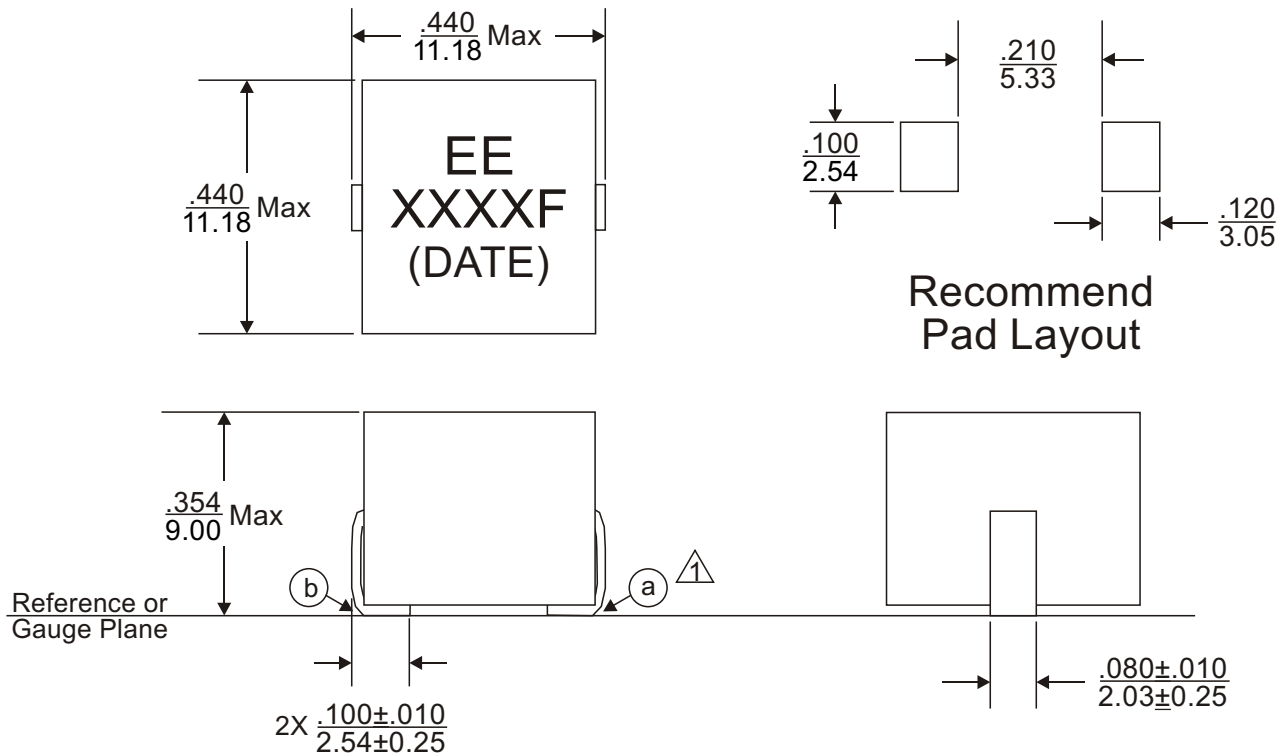
Part Number	Inductance <sup>2</sup> (nH±20%)	Inductance@Irated (nH Typ)	Irated <sup>3</sup> (Adc)	DCR <sup>1</sup> (mΩ)	Saturation Current <sup>4</sup> (Adc)		Heating Current <sup>5</sup> (A)	Marking XXXXF
					25°C	100°C		
831-02983F	225	225	35	0.63±9.5%	68	59	35	2983F
831-02984F	270	280	35	0.63±9.5%	50	44	35	2984F
831-02985F	325	325	35	0.63±9.5%	43	36	35	2985F
831-02986F	470	380	23	0.63±9.5%	30	23	35	2986F

**Notes:**

1. The DCR is measured from point a to point b, as shown on the mechanical drawing.
2. Inductance is tested at 0.1Vrms, 1MHz.
3. The rated current as listed is either the saturation current or the heating current depending on which value is lower.
4. The saturation current, Isat, is the current at which the inductance of the component drops by 20% typical at the stated ambient temperatures (25°C and 100°C).
5. The heating current is the DC current required to raise the component temperature by approximately 40°C at ambient temperature of 25°C. This current is determined by soldering the component on a typical application PCB, and then applying the current to the device for 30 minutes without any forced air cooling.
6. Operating temperature range: -40°C to +130°C. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperatures should be verified in the end application.



MECHANICAL DIMENSIONS

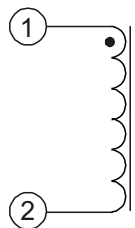


Notes:

7. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
8. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 4.3 typ.
Tape & Reel	: 350 / reel

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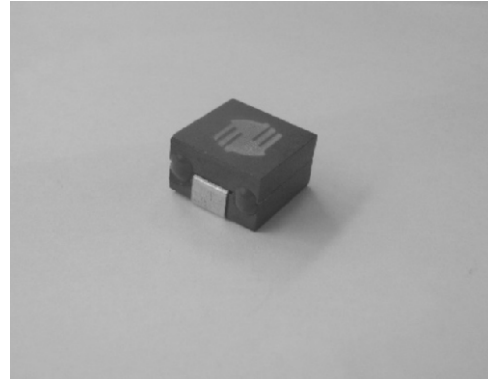
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-  Custom design is also available
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

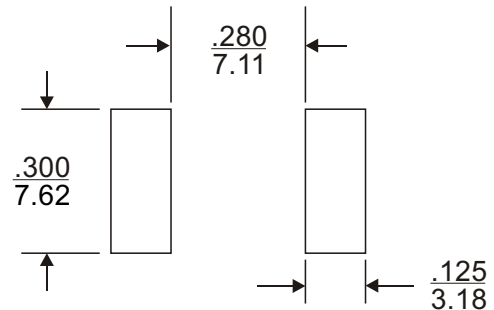
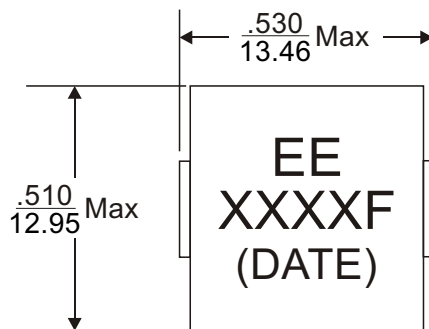
Part Number	Inductance <sup>2</sup> (nH±20%)	Inductance@Irated (nH Typ)	Irated <sup>3</sup> (Adc)	DCR <sup>1</sup> (m Ω)	Saturation Current <sup>4</sup> (Adc)		Heating Current <sup>5</sup> (A)	Marking XXXXF
					25°C	100°C		
831-02987F	210	210	45	0.32±9.4%	71	64	45	2987F
831-02988F	260	260	45	0.32±9.4%	60	55	45	2988F
831-02989F	320	285	41	0.32±9.4%	50	45	45	2989F
831-02990F	440	363	30	0.32±9.4%	35	30	45	2990F
831-03130F	210	210	45	0.53±11.3%	71	64	45	3130F
831-03131F	260	260	45	0.53±11.3%	60	55	45	3131F
831-03132F	320	285	41	0.53±11.3%	50	45	45	3132F
831-03133F	440	363	30	0.53±11.3%	35	30	45	3133F

**Notes:**

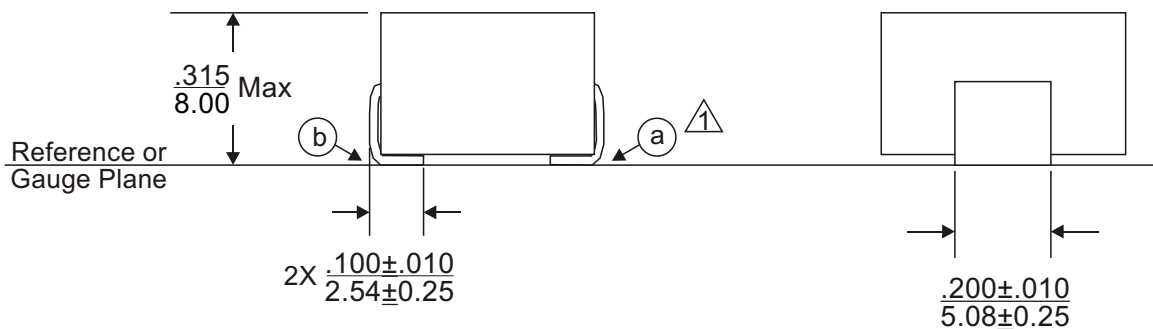
- The DCR is measured from point a to point b, as shown on the mechanical drawing.
- Inductance is tested at 0.1Vrms, 1MHz.
- The rated current as listed is either the saturation current or the heating current depending on which value is lower.
- The saturation current, Isat, is the current at which the inductance of the component drops by 20% typical at the stated ambient temperatures (25°C and 100°C).
- The heating current is the DC current required to raise the component temperature by approximately 40°C at ambient temperature of 25°C. This current is determined by soldering the component on a typical application PCB, and then applying the current to the device for 30 minutes without any forced air cooling.
- Operating temperature range: -40°C to +130°C. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperatures should be verified in the end application.



MECHANICAL DIMENSIONS



Recommend  
Pad Layout

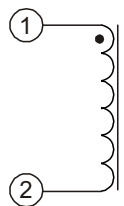


Notes:

7. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
8. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 5.5 typ.
Tape & Reel	: 400 / reel

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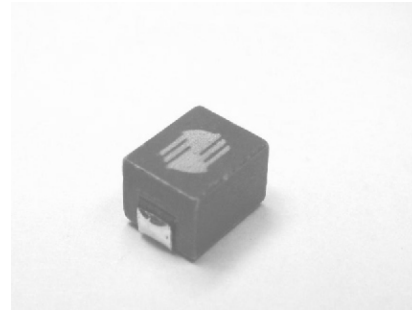
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-  Used in high power application
-  Ideal for high current devices
-  Ideal for computers and portable power devices, DC-DC converters, energy storage applications and Input-Output filter applications
-  Custom design is also available
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

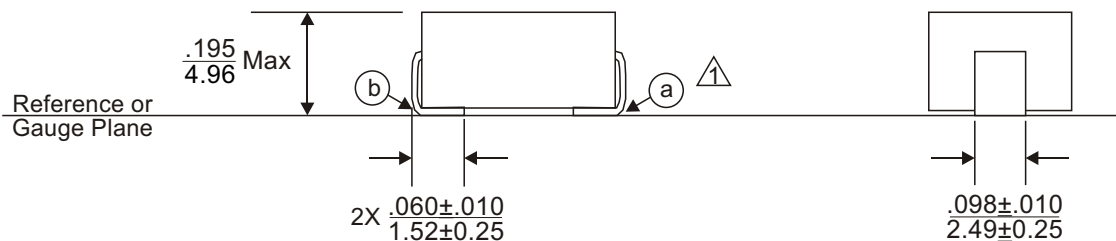
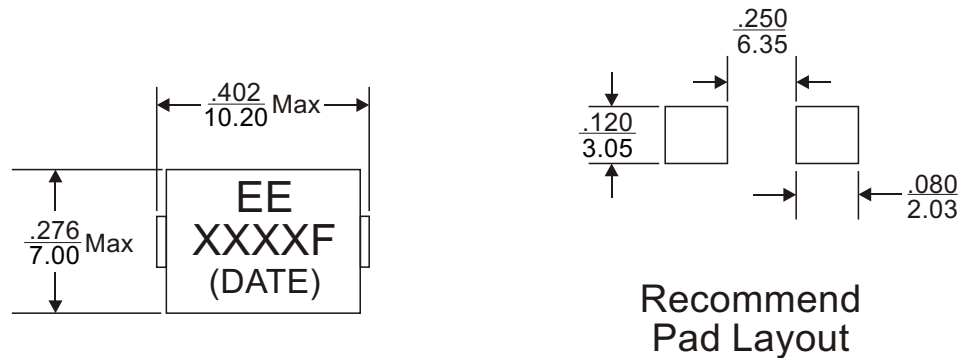
Part Number	Inductance <sup>2</sup> (nH±20%)	Inductance@Irated (nH Typ)	Irated <sup>3</sup> (Adc)	DCR <sup>1</sup> (m Ω)	Saturation Current <sup>4</sup> (Adc)		Heating Current <sup>5</sup> (A)	Marking XXXXF
					25°C	100°C		
831-03100F	85	85	31	0.39±7.7%	70	70	31	3100F
831-02979F	100	100	31	0.39±7.7%	70	65	31	2979F
831-02980F	120	120	31	0.39±7.7%	52	42	31	2980F
831-02981F	155	150	31	0.39±7.7%	40	36	31	2981F
831-02982F	220	176	25	0.39±7.7%	33	25	31	2982F
831-03101F	85	85	31	0.55±7.3%	70	70	31	3101F
831-03102F	100	100	31	0.55±7.3%	70	65	31	3102F
831-03103F	120	120	31	0.55±7.3%	52	42	31	3103F
831-03104F	155	150	31	0.55±7.3%	40	36	31	3104F
831-03105F	220	176	25	0.55±7.3%	33	25	31	3105F

**Notes:**

- The DCR is measured from point a to point b, as shown on the mechanical drawing.
- Inductance is tested at 0.1Vrms, 1MHz.
- The rated current as listed is either the saturation current or the heating current depending on which value is lower.
- The saturation current, Isat, is the current at which the inductance of the component drops by 20% typical at the stated ambient temperatures (25°C and 100°C).
- The heating current is the DC current required to raise the component temperature by approximately 40°C at ambient temperature of 25°C. This current is determined by soldering the component on a typical application PCB, and then applying the current to the device for 30 minutes without any forced air cooling.
- Operating temperature range: -40°C to +130°C. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperatures should be verified in the end application.



MECHANICAL DIMENSIONS

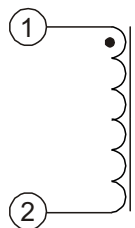


Notes:

7. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
8. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 1.3 typ.
Tape & Reel	: 950 / reel

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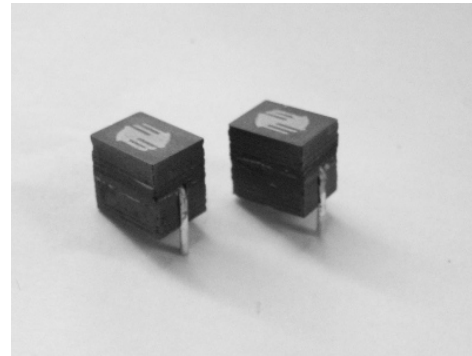
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-  Ideal for high current devices
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-  Custom design is also available
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

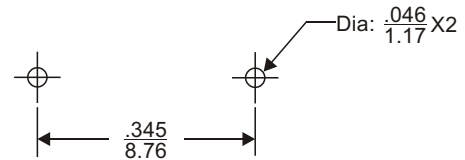
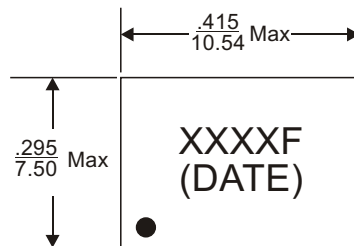
Part Number	Inductance <sup>1</sup> @0Adc (nH±10%)	Inductance <sup>4</sup> @Irated (nH Typ)	Irated <sup>5</sup> (Adc)	DCR (mΩ)	Saturation Current <sup>2</sup> (Adc)		Heating Current <sup>3</sup> (A)	Marking XXXXF
					25°C	100°C		
831-03192F	140	140	40	0.49±4.1%	80	80	40	3192F
831-03193F	160	160	40	0.49±4.1%	70	60	40	3193F
831-03194F	190	182	40	0.49±4.1%	65	55	40	3194F
831-03195F	220	207	40	0.49±4.1%	55	50	40	3195F

**Notes:**

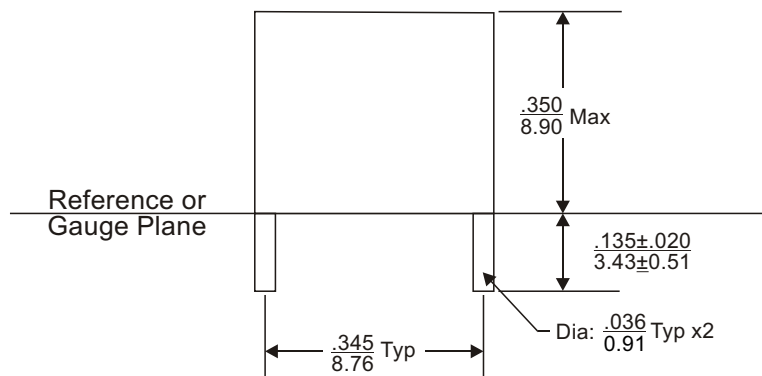
1. Inductance is tested at 0.1Vrms, 1MHz.
2. Saturation current, Isat, indicates the value of DC current when the inductance is 20% typical lower than its initial value at stated ambient temperatures (25°C and 100°C).
3. Heating current, Irms, is the value of current when the temperature rising  $T=40^{\circ}\text{C}$  typical.
4. Rated inductance is for reference only.
5. The rated current listed is the lower of the saturation current @25°C or the heating current.
6. Operating temperature range: -40°C to +130°C.
7. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



MECHANICAL DIMENSIONS



Recommended Pad Layout

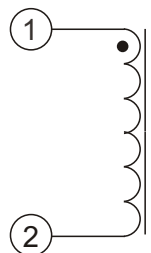


Notes:

8. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
9. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram) : 3.0 typ.

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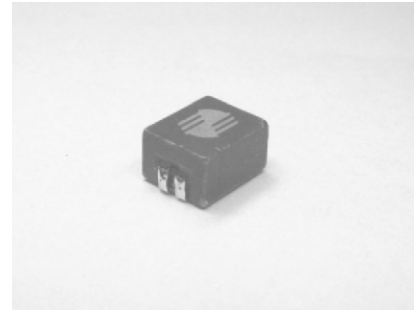
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-  Low profile SMD type.
-  High energy storage and low DCR.
-  Magnetically shielded, suitable for high density mounting.
-  Ideal for power source circuits, DC-DC convert, DC-AC Inverters inductor and input-Output filter application.
-  Custom inductance value or tolerance is available.
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Ls <sup>3</sup> @0Adc (nH 20%)	Ls @ Isat1 (nH)	2*LK <sup>4</sup> @0Adc (nH 20%)	2*LK @ Isat2 (nH)	DCR (mΩ)	Isat1 <sup>5</sup> (Adc)	Isat2 <sup>6</sup> (Adc)	Marking (XXXY)
PBD12750M-201F	200	160 Min	120	96 Min	0.175 15%	24	50	201F
PBD12750M-411F	410	375 20%	350	320 10%	0.175 15%	13	30	411F
PBD12750M-481F	480	432 20%	400	360 20%	0.175 15%	13	28	481F
PBD12750M-501F	500	450 20%	450	410 20%	0.175 15%	12	20	501F

**Notes:**

1. Ordering Information: PBD12750a - bbbFc.

PBD12750 = Product Type.

a = Tolerance of Inductance (M = ± 20%).

bbb = Rated inductance value in nH (i.e. 411 = 410nH; 501 = 500nH).

F = Internal Control Code.

c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).

2. Inductance is tested at 1Vrms, 100kHz .

3. Ls is the inductance of each phase(1-4 @ 2,3 open or 2-3 @ 1,4 open).

4. 2\*Lk is two times of leakage inductance (1-2 @ 3,4 short).

5. Isat1 is the DC current which cause the Ls drop to Ls @ Isat1.

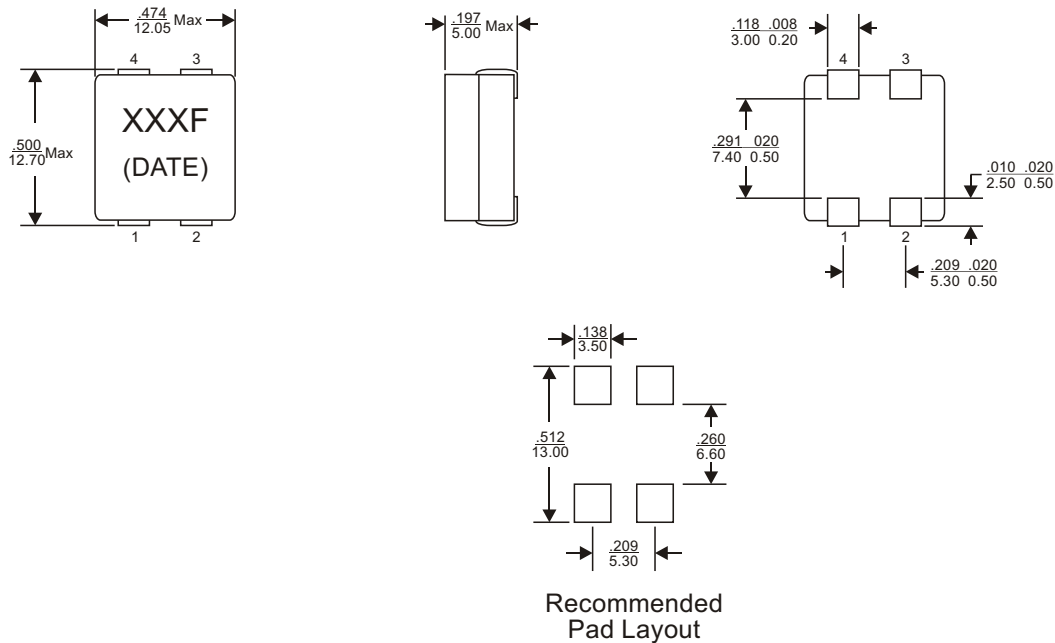
6. Isat2 is the DC current which cause the 2\*Lk drop to 2\*Lk @ Isat2.

7. Operating temperature range: -40°C to +125°C.

8. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



**MECHANICAL DIMENSIONS**

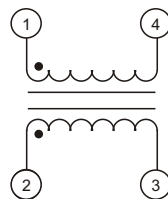


**Notes:**

9. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
10. Unless otherwise specified, all tolerances are  $\pm \frac{0.010}{0.25}$ .

Weight (in gram)	:	3.0typ.
Tape & Reel	:	650 / reel

**SCHEMATIC**



**FOR MORE INFORMATION, PLEASE CONTACT**

**HEADQUARTER**

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Website: <http://www.eleceltek.com> / [www.eemagnetic.com](http://www.eemagnetic.com)

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Tel: (852) 2954 3333 • Fax: (852) 2954 3304



-  Less board space and lower cost
-  High energy storage and low DCR.
-  Magnetically shielded, suitable for high density mounting.
-  Ideal for power source circuits, DC-DC convert, DC-AC Inverters inductor and input-Output filter application.
-  Custom inductance value or tolerance is available.
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Ls <sup>3</sup> @0Adc (nH %)	Ls @ Isat1 (nH TYP)	Rated <sup>4</sup> (Adc)	DCR (mΩ)	Isat2 <sup>5</sup>		Heating <sup>6</sup> Current (Adc TYP)	Marking (XXXY)
					25 C (Adc)	C (Adc)		
PBD13876L-121F	115	115	30	0.29 10% (per phase)	94	78	30A (per phase)	121F
PBD13876L-151F	150	150	30		72	60		151F
PBD13876L-181F	175	175	30		62	52		181F
PBD13876L-221F	215	215	30		48	43		221F
PBD13876L-231F	230	230	30		43	39		231F
PBD13876L-271F	270	270	30		37	33		271F
PBD13876L-301F	300	240	30		32	28		301F

**Notes:**

1. Ordering Information: PBD13876a - bbbFc.

PBD13876 = Product Type.

a = Tolerance of Inductance (L = ± 15%).

bbb = Rated inductance value in nH (i.e. 151 = 150nH; 301 = 300nH).

F = Internal Control Code.

c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).

2. Inductance is tested at 1Vrms, 100kHz .

3. The rated current as listed is either the saturation current or the heating current depending on which value is lower.

4. The DCR is measured from point a to point b , as shown on the mechanical drawing.

5. The saturation current, Isat, is the typical current which causes the inductance to drop by 20% at the stated ambient temperatures (25°C and 100°C).

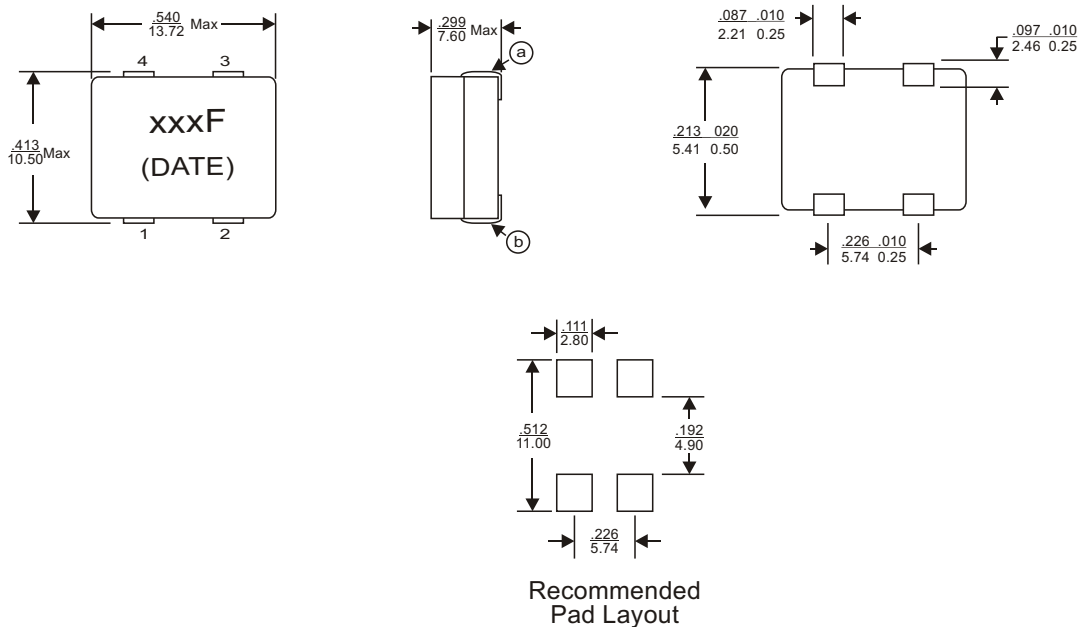
6. The heating current is the DC current which causes the temperature of the part to increase by approximately 40°C.

7. Operating temperature range: -40°C to +125°C.

8. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



**MECHANICAL DIMENSIONS**

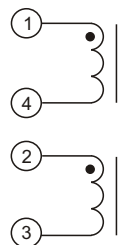


**Notes:**

- All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
- Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	:	4.0typ.
Tape & Reel	:	400 / reel

**SCHEMATIC**



**FOR MORE INFORMATION, PLEASE CONTACT**

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-  Low core loss
-  High energy storage and low DCR.
-  Magnetically shielded, suitable for high density mounting.
-  Ideal for power source circuits, DC-DC convert, DC-AC Inverters inductor and input-Output filter application.
-  Custom inductance value or tolerance is available.
-  RoHS compliant and available in Halogen Free.



**ELECTRICAL SPECIFICATION @ 25°C**

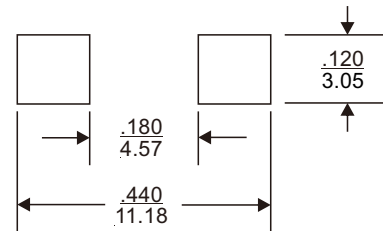
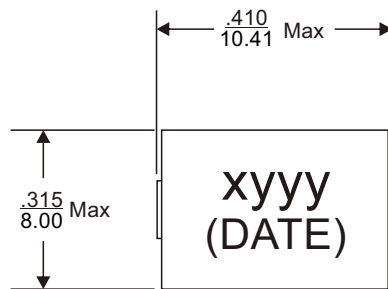
Part Number	Ls <sup>2</sup> @0Adc (nH ± 15%)	Ls @ Isat1 (nH TYP)	Rated (Adc) <sup>3</sup>	DCR (mΩ) <sup>4</sup>	Isat2 <sup>5</sup>		Heating Current (Adc TYP) <sup>6</sup>	Marking (XXYY)
					25°C (Adc)	100°C (Adc)		
PBS1076L-121F	115	115	41	0.29 ± 10% (per phase)	94	80	41A (per phase)	x121
PBS1076L-151F	150	150	41		72	61		x151
PBS1076L-181F	175	175	41		62	53		x181
PBS1076L-211F	215	195	41		48	41		x211
PBS1076L-231F	230	208	37		43	37		x231
PBS1076L-271F	270	241	31		37	34		x271
PBS1076L-301F	300	260	27		32	28		x301

**Notes:**

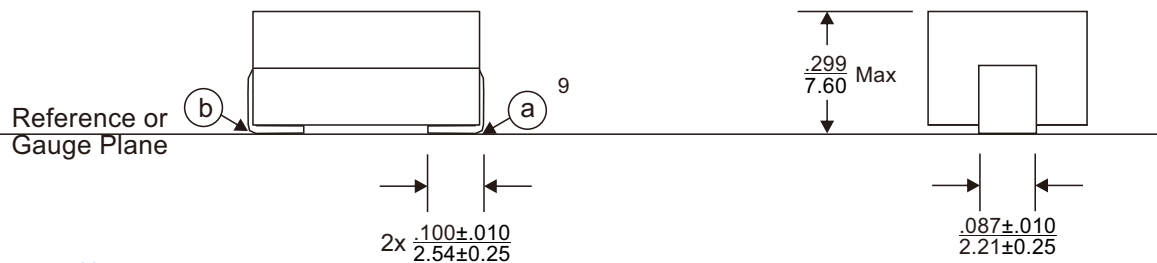
- Ordering Information: PBS1076x - yyyFc.  
 PBS1076 = Product Type.  
 x = Tolerance of Inductance (M = ± 20% ; L = ± 15%).  
 yyy = Rated inductance value in nH (i.e. 151 = 150nH; 301 = 300nH).  
 F = Internal Control Code.  
 c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).
- Inductance is tested at 0.1Vrms, 100kHz .
- The rated current as listed is either the saturation current or the heating current depending on which value is lower.
- The DCR is measured from point a to point b , as shown below on the mechanical drawing.
- The saturation current ( Isat ) is the typical current which causes the inductance to drop by 20% at the stated ambient temperatures (25°C and 100°C). This current is determined by placing the component in the specified ambient environment and applying a short duration pulse current ( to eliminate self-heating effects ) to the component.
- The heating current is the DC current which causes the part temperature to increase by approximately 40°C.
- Operating temperature range: -40°C to +125°C.
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



**MECHANICAL DIMENSIONS**



**Recommend Pad Layout**

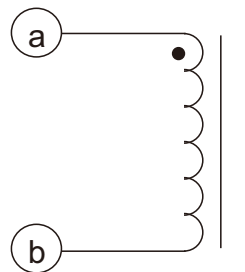


**Notes:**

9. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.  
10. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 2.5typ.
Tape & Reel	: 400 / reel

**SCHEMATIC**



**FOR MORE INFORMATION, PLEASE CONTACT**

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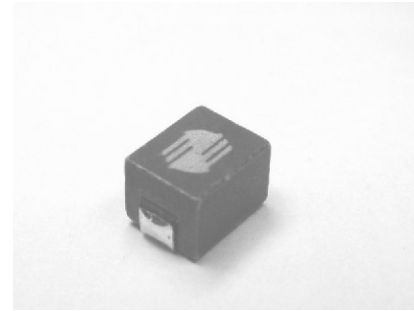
Email: [eempl@eleceltek.com](mailto:eempl@eleceltek.com)

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-  Low core loss
-  High energy storage and low DCR.
-  Magnetically shielded, suitable for high density mounting.
-  Ideal for power source circuits, DC-DC convert, DC-AC Inverters inductor and input-Output filter application.
-  Custom inductance value or tolerance is available.
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

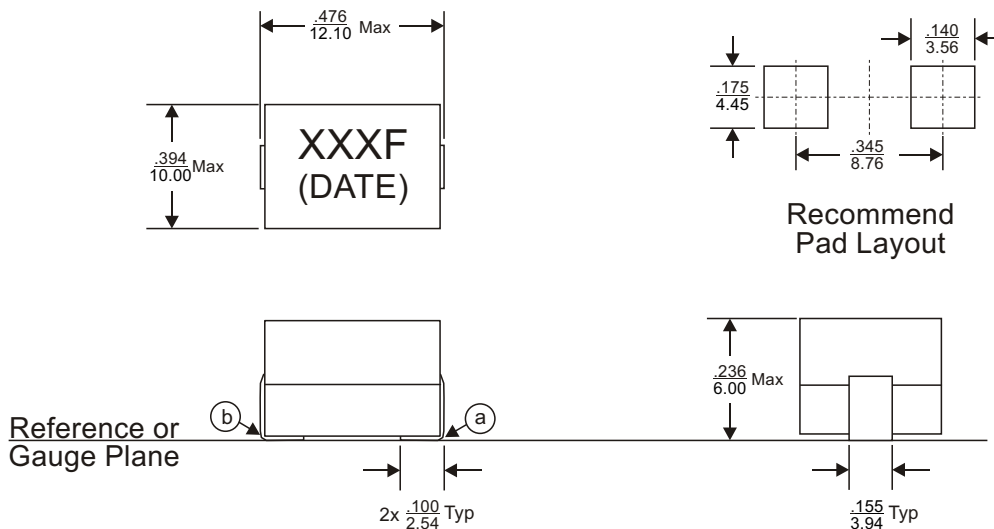
Part Number	Inductance @0Adc (nH 15%)	Inductance @Irated (nH TYP)	Irated <sup>3</sup> (Adc)	DCR <sup>4</sup> (mΩ)	Inductance @Isat (nH TYP)	Saturation Current <sup>5</sup> (A)		Irms <sup>6</sup> (A)	Marking (XXXY)
						25°C	100°C		
PBS12160L-121F	120	120	36	0.48 6.5%	96	84	75	36	121F
PBS12160L-181F	180	180	36	0.48 6.5%	144	64	52	36	181F
PBS12160L-211F	215	215	36	0.48 6.5%	172	53	47	36	211F
PBS12160L-231F	230	230	36	0.48 6.5%	184	47	44	36	231F
PBS12160L-321F	325	282	31	0.48 6.5%	260	34	31	36	321F
PBS12160L-361F	365	315	27	0.48 6.5%	292	30	27	36	361F

**Notes:**

- Ordering Information: PBS12160a - bbbFc.  
 PBS12160 = Product Type.  
 a = Tolerance of Inductance ( $L = \pm 15\%$ ).  
 bbb = Rated inductance value in nH (i.e. 181 = 180nH; 321 = 320nH).  
 F = Internal Control Code.  
 c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).
- Inductance is tested at 1Vrms, 100kHz.
- The rated current as listed is either the saturation current or the heating current depending on which value is lower.
- The DCR is measured from point a to point b, as shown on the mechanical dimensions.
- The saturation current, Isat, is the typical current which causes the inductance to drop by 20% at the stated ambient temperatures (25°C and 100°C).
- The heating current is the DC current which causes the temperature of the part to increase by approximately 40°C.
- Operating temperature range: -40°C to +125°C.
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



**MECHANICAL DIMENSIONS**

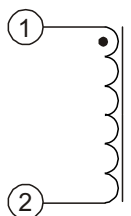


**Notes:**

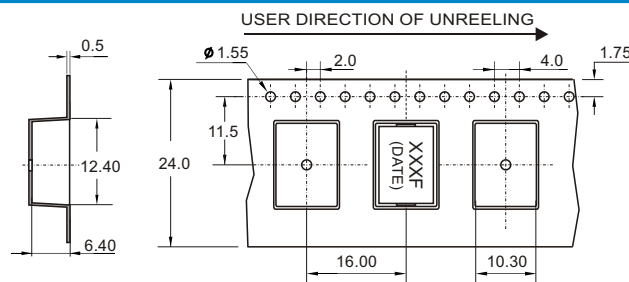
9. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.  
10. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 2.8typ.
Tape & Reel	: 600 / reel

**SCHEMATIC**



**PACKAGING**



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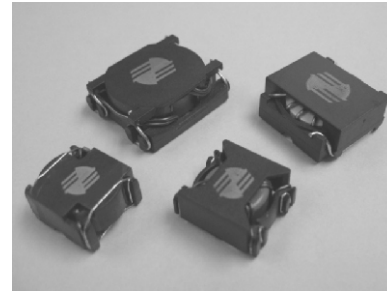
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Tel: (852) 2954 3333 • Fax: (852) 2954 3304



-  Inductance range: 0.88uH to 1950uH
-  Current rating: up to 23.8A
-  Case material meets flammability requirements of UL 94-V0
-  Frequency range up to 1MHz
-  Operating temperature -40 C to +130 C
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Inductance <sup>1</sup> @ 0Adc (uH)	Rated Current (A)	Inductance <sup>1</sup> @ Irated (uH)	DCR (m Max)	Reference ET (V- Sec)	Package Number
SISPI53AM-1R1F	1.1	3.40	1.01	11	0.53	1-1
SISPI53AM-7R0F	7	1.40	6.2	70	1.33	1-1
SISPI53AM-230F	22.7	1.00	17.6	125	2.4	1-1
SISPI53BM-5R2F	5.2	4.80	3.8	17.3	1.76	1-2
SISPI53BM-120F	12.3	2.80	9.4	43.4	2.7	1-2
SISPI53BM-350F	35.3	1.40	29.7	166	4.6	1-2
SISPI53BM-171F	167	0.94	114	380	10	1-2
SISPI53CM-3R8F	3.8	8.00	2.5	8.3	1.77	1-3
SISPI53CM-7R5F	7.5	5.40	5.1	18	2.51	1-3
SISPI53CM-220F	21.9	2.70	16.2	63	4.29	1-3
SISPI53CM-730F	73	1.30	58.1	290	7.83	1-3
SISPI53CM-291F	292	0.90	192	560	15.7	1-3
SISPI53CM-671F	672	0.72	383	862	23.5	1-3
SISPI53DM-7R9F	7.9	7.80	4.9	12.4	3.04	1-4
SISPI53DM-140F	14	5.50	9	22.3	4.06	1-4
SISPI53DM-410F	40.5	2.70	29.1	85	6.9	1-4
SISPI53DM-112F	1134	0.74	645	1250	36.5	1-4
SISPI53EM-160F	16	7.20	9.3	18.7	4.92	1-5
SISPI53EM-260F	25.9	5.10	16.1	32	6.27	1-5
SISPI53EM-730F	72.9	2.60	50	133	10.5	1-5
SISPI53EM-202F	1950	0.71	1070	1700	54.4	1-5
831-00518F	1.25	14.30	0.81	2.5	1.035	2-1
831-00027F	2.1	11.50	1.32	4	1.33	2-1
831-00042F	2.8	13.90	1.68	3.6	1.83	2-2
831-00659F	4.2	11.40	2.5	5.4	2.23	2-2
831-00003F	6.5	12.40	3.5	6.6	3.1	2-3
831-00678F	8.4	10.40	4.7	8.3	3.58	2-3
831-00639F	10.5	15.40	5.2	6.2	5.21	2-4
831-00768F	17.6	10.90	9.4	12.3	6.84	2-4
831-00005F <sup>2</sup>	0.88	23.80	0.53	6	1	3-1
831-00004F <sup>2</sup>	2.1	21.00	1.1	2.5	1.75	3-2
831-00011F <sup>2</sup>	4	22.40	2.1	6.8	3.25	3-3
831-02803F <sup>2</sup>	6.575	6.40	4.025	23	3.135	4



ELECTRICAL SPECIFICATION @ 25°C

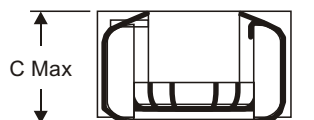
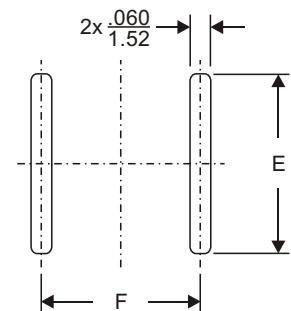
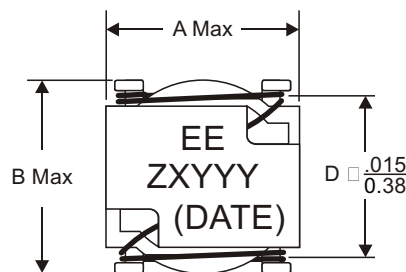
Notes:

1. Inductance is measured at 100kHz, 0.10Vrms.
2. Parts are connected in parallel.
3. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

MECHANICAL DIMENSIONS

Package 1

Package Number	A	B	C	D	E	F
1-1	.340 8.64	.340 8.64	.270 6.86	.260 6.60	.300 7.62	.270 6.86
1-2	.435 11.05	.440 11.18	.360 9.14	.350 8.89	.400 10.16	.360 9.14
1-3	.565 14.35	.570 14.48	.360 9.14	.450 11.43	.520 13.21	.460 11.68
1-4	.600 15.24	.620 15.75	.390 9.91	.500 12.70	.550 13.97	.500 12.70
1-5	.670 17.02	.700 17.78	.390 9.91	.580 14.73	.620 15.75	.590 14.99



REFERENCE OR  
GAUGE PLANE

Notes:

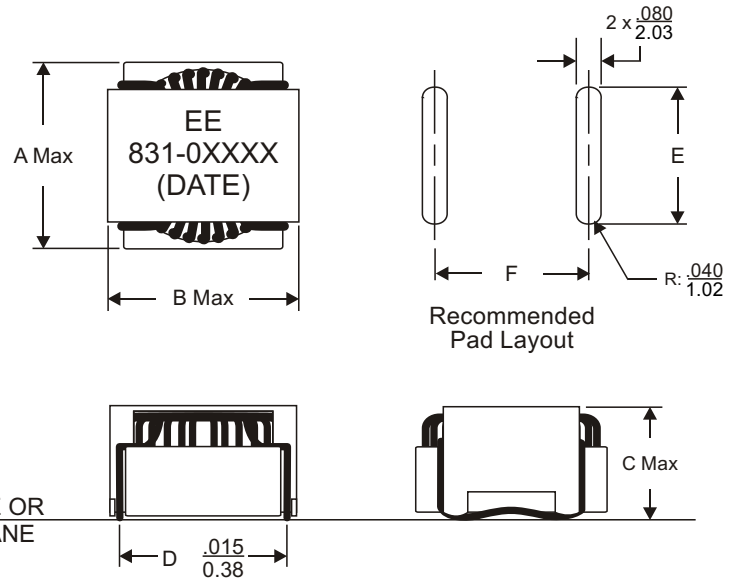
4. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in inches.
5. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .
6. Add the tolerance code of the inductance by replacing "X" of the part number by M= 20%.
7. Add the size code by replacing "Z" of the part number by A, B, C, D or E.



MECHANICAL DIMENSIONS

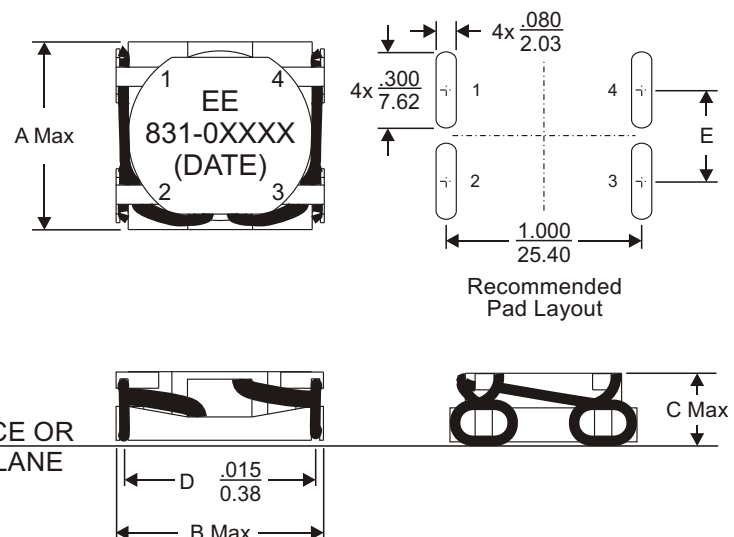
Package 2

Package Number	A	B	C	D	E	F
2-1	<u>.620</u> 15.75	<u>.605</u> 15.37	<u>.370</u> 9.40	<u>.500</u> 12.70	<u>.440</u> 11.18	<u>.500</u> 12.70
2-2	<u>.670</u> 17.02	<u>.670</u> 17.02	<u>.400</u> 10.16	<u>.560</u> 14.22	<u>.490</u> 12.45	<u>.570</u> 14.48
2-3	<u>.740</u> 18.80	<u>.740</u> 18.80	<u>.400</u> 10.16	<u>.630</u> 16.00	<u>.560</u> 14.22	<u>.640</u> 16.26
2-4	<u>.940</u> 23.88	<u>.940</u> 23.88	<u>.400</u> 10.16	<u>.820</u> 20.83	<u>.700</u> 17.78	<u>.830</u> 21.08



Package 3

Package Number	A	B	C	D	E	F
3-1	<u>.715</u> 18.16	<u>.865</u> 21.97	<u>.390</u> 9.91	<u>.760</u> 19.30	<u>.360</u> 9.14	<u>.770</u> 19.56
3-2	<u>.800</u> 20.32	<u>.910</u> 23.11	<u>.390</u> 9.91	<u>.800</u> 20.32	<u>.440</u> 11.18	<u>.810</u> 20.57
3-3	<u>1.000</u> 25.40	<u>1.110</u> 28.19	<u>.390</u> 9.91	<u>1.000</u> 25.40	<u>.620</u> 15.75	<u>1.010</u> 25.65



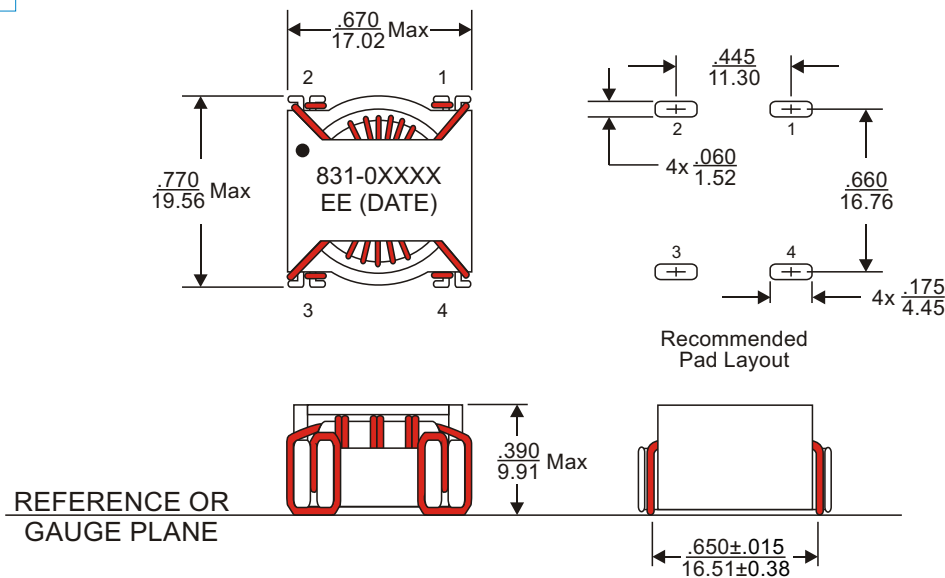
Notes:

9. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in inches.
10. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .



MECHANICAL DIMENSIONS

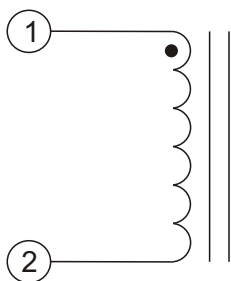
Package 4



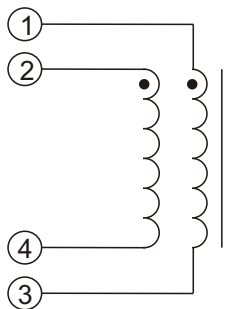
Notes:

12. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in inches.
13. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

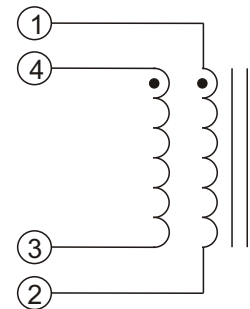
SCHEMATICS



Package 1 and 2



Package 3



Package 4

FOR MORE INFORMATION, PLEASE CONTACT

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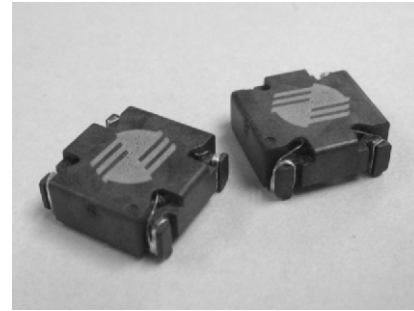
Email: eempl@eleceltek.com

Website: <http://www.eleceltek.com> / [www.eemagnetic.com](http://www.eemagnetic.com)

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-  Inductance range: 2.0 H to 364 H
-  Current Rating: up to 8.3A
-  Footprint: 12.7mm x 12.7mm maximum
-  Height: 5.5mm maximum
-  Operating temperature -40 C to +130 C
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

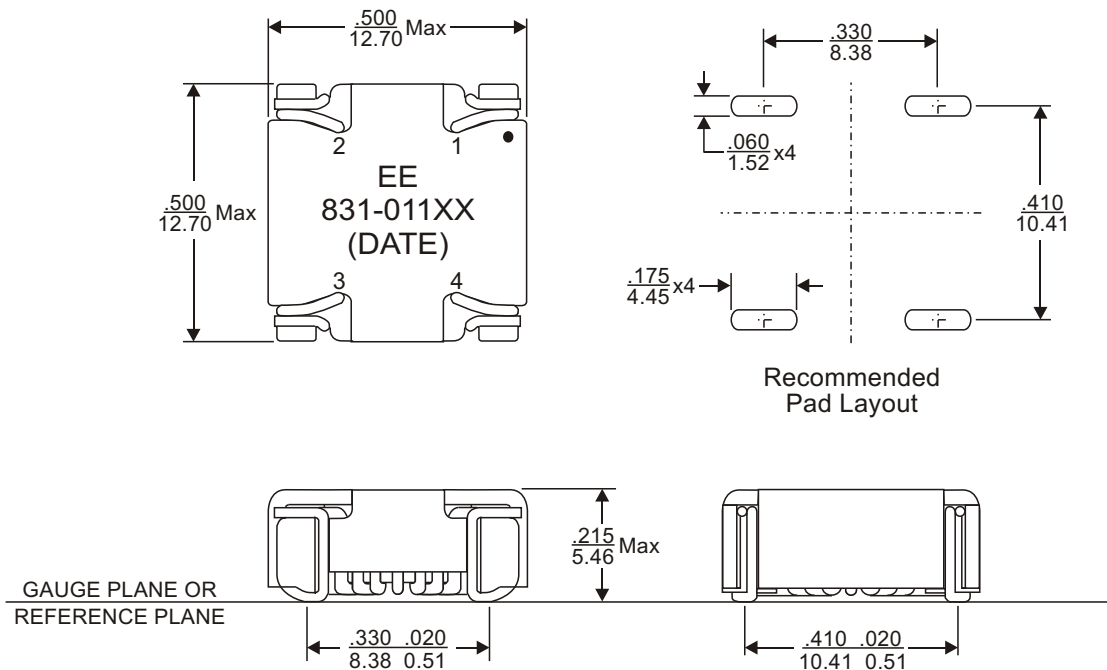
Part Number	Inductance @I <sub>rated</sub> (H Min)	I <sub>rated</sub> (A)	DCR (m Max)	ET (V- sec)	Inductance @0Adc (H 20%)	100 Gauss ET <sub>100</sub> (V- sec)	1 Amp DC H <sub>1</sub> (Orsted)	Connection
831-01181F	2.0	8.30	7.6	7.31	2.2	1.20	5.43	Parallel
831-01179F	2.4	7.20	10.9	7.81	2.6	1.33	5.97	Parallel
831-01176F	5.0	5.20	19.0	11.72	5.5	1.93	8.69	Parallel
831-01181F	7.0	4.16	32.0	14.61	8.75	2.41	10.86	Series
831-01174F	9.3	3.80	29.8	16.12	10.4	2.65	11.95	Parallel
831-01179F	8.4	3.78	43.6	15.62	10.4	2.65	11.95	Series
831-01172F	14.1	3.10	45.3	19.73	15.7	3.25	14.66	Parallel
831-01170F	19.8	2.60	66.3	23.45	22.1	3.86	17.38	Parallel
831-01176F	17.9	2.60	76.0	23.43	22.45	3.86	17.38	Series
831-01168F	29.3	2.20	106	28.50	32.8	4.70	21.18	Parallel
831-01174F	33.8	1.89	120	32.25	41.7	5.30	23.89	Series
831-01167F	42.6	1.80	151	34.49	47.6	5.66	25.52	Parallel
831-01172F	50.9	1.54	182	39.46	62.8	6.51	29.32	Series
831-01166F	61.3	1.50	224	40.85	67.5	6.75	30.41	Parallel
831-01170F	71.5	1.30	266	46.90	88.2	7.71	34.75	Series
831-01165F	65.0	1.22	324	46.22	91.0	7.83	35.30	Parallel
831-01168F	106.1	1.07	404	57.00	131.0	9.40	42.36	Series
831-01167F	154.2	0.89	604	68.99	190.3	11.33	51.05	Series
831-01166F	218.9	0.74	888	81.70	270.2	13.50	60.82	Series
831-01165F	260.0	0.61	1295	92.43	364.0	15.66	70.59	Series

**Notes:**

1. For the copper loss(mW), calculate  $I_{dc}^2 \times R_N$ .
2. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



MECHANICAL DIMENSIONS

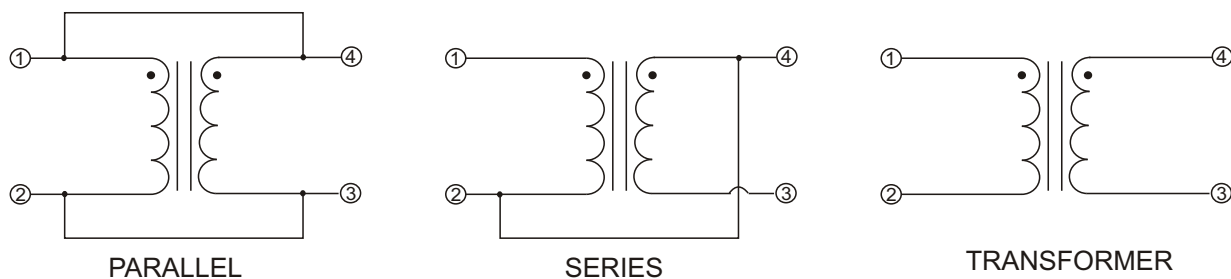


Notes:

3. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in inches.
4. Unless otherwise specified, all tolerances are  $\pm \frac{0.10}{0.25}$ .

Weight (in gram)	: 1.5 typ.
Tape & Reel	: 600 / reel

SCHEMATICS



FOR MORE INFORMATION, PLEASE CONTACT

HEADQUARTER

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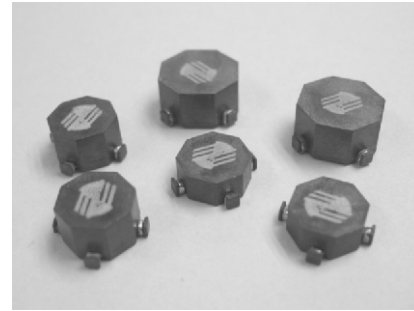
Website: <http://www.eleceltek.com> / [www.eemagnetic.com](http://www.eemagnetic.com)

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-  Surface mount design that can be used as single or coupled inductors or 1:1 transformers that provide isolation between two windings
-  Higher cost versions are designed with high frequency, low loss material which allows maximum power density with minimum core loss
-  Lower cost versions incorporate powdered iron cores and deliver frequency responses
-  Current rated from 0.22 to 7.9Adc
-  Isolation voltage: 300V
-  Operating temperature -40 C to +125 C
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Parallel				Series				Package Number
	Open Circuit Inductance <sup>1</sup> (uH 20%)	Full Load Inductance (uH Min)	Full Load Current (Adc)	DC Resistance ( Max)	Open Circuit Inductance <sup>1</sup> (uH 20%)	Full Load Inductance (uH Min)	Full Load Current (Adc)	DC Resistance ( Max)	
831-01526F	0.42	0.31	5.50	0.005	1.67	1.25	2.75	0.021	1P
831-01527F	0.60	0.43	5.10	0.006	2.40	1.74	2.55	0.025	1P
831-01528F	1.07	0.73	4.50	0.008	4.28	2.92	2.25	0.032	1P
831-01529F	2.02	1.36	3.40	0.013	8.08	5.44	1.70	0.054	1P
831-01530F	4.83	3.37	2.00	0.041	19.31	13.47	1.00	0.161	1P
831-01531F	8.08	5.31	1.80	0.052	32.33	21.23	0.90	0.207	1P
831-01532F	9.62	6.23	1.70	0.057	38.48	24.94	0.85	0.227	1P
831-01533F	15.03	9.62	1.40	0.087	60.12	38.47	0.70	0.348	1P
831-01534F	20.46	14.12	1.00	0.158	81.83	56.47	0.50	0.634	1P
831-01535F	25.40	17.07	0.96	0.177	101.60	68.29	0.48	0.708	1P
831-01536F	32.33	22.27	0.80	0.250	129.32	89.06	0.40	1.001	1P
831-01537F	50.52	33.57	0.70	0.316	202.07	134.27	0.35	1.263	1P
831-01538F	68.40	43.65	0.66	0.373	273.61	174.61	0.33	1.490	1P
831-01539F	99.01	63.64	0.54	0.557	396.06	254.55	0.27	2.227	1P
831-01540F	150.72	96.64	0.44	0.844	602.87	386.56	0.22	3.376	1P
831-01541F	198.41	130.79	0.36	1.208	793.65	523.16	0.18	4.831	1P
831-01542F	299.87	190.05	0.32	1.525	1199.46	760.19	0.16	6.100	1P
831-01543F	0.54	0.42	5.90	0.006	2.18	1.69	2.95	0.024	2P
831-01544F	0.85	0.64	5.40	0.007	3.40	2.55	2.70	0.029	2P
831-01545F	1.22	0.89	5.00	0.008	4.90	3.57	2.50	0.033	2P
831-01546F	2.18	1.56	3.90	0.014	8.70	6.26	1.95	0.055	2P
831-01547F	4.90	3.57	2.50	0.032	19.58	14.26	1.25	0.128	2P
831-01548F	7.65	5.31	2.30	0.040	30.60	21.23	1.15	0.158	2P
831-01549F	9.83	6.73	2.10	0.045	39.30	26.92	1.05	0.179	2P
831-01550F	14.99	10.51	1.60	0.085	59.98	42.02	0.80	0.339	2P
831-01551F	19.58	13.37	1.50	0.097	78.34	53.48	0.75	0.387	2P



**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Parallel				Series				Package Number
	Open Circuit Inductance <sup>1</sup> (uH 20%)	Full Load Inductance (uH Min)	Full Load Current (Adc)	DC Resistance ( Max)	Open Circuit Inductance <sup>1</sup> (uH 20%)	Full Load Inductance (uH Min)	Full Load Current (Adc)	DC Resistance ( Max)	
831-01552F	24.79	16.60	1.40	0.109	99.14	66.38	0.70	0.436	2P
831-01553F	32.67	21.29	1.30	0.126	130.70	85.17	0.65	0.503	2P
831-01554F	49.10	35.31	0.82	0.305	196.38	141.24	0.41	1.221	2P
831-01555F	68.85	47.93	0.76	0.362	275.40	191.71	0.38	1.445	2P
831-01556F	99.14	69.56	0.62	0.541	396.58	278.22	0.31	2.162	2P
831-01557F	148.10	100.07	0.56	0.665	592.42	400.27	0.28	2.660	2P
831-01558F	201.59	138.49	0.46	0.951	806.34	553.97	0.23	3.804	2P
831-01559F	300.42	197.52	0.42	1.176	1201.70	790.08	0.21	4.703	2P
831-01560F	0.46	0.35	6.20	0.006	1.85	1.42	3.10	0.025	3P
831-01561F	0.67	0.50	5.70	0.007	2.66	1.98	2.85	0.028	3P
831-01562F	0.91	0.65	5.40	0.008	3.63	2.62	2.70	0.032	3P
831-01563F	1.85	1.24	4.60	0.011	7.40	4.97	2.30	0.045	3P
831-01564F	4.74	3.04	3.20	0.022	18.94	12.15	1.60	0.090	3P
831-01565F	8.16	4.90	2.80	0.030	32.63	19.60	1.40	0.119	3P
831-01566F	9.79	5.71	2.70	0.033	39.15	22.85	1.35	0.131	3P
831-01567F	14.50	8.50	2.20	0.050	58.02	34.01	1.10	0.198	3P
831-01568F	20.15	13.12	1.50	0.111	80.59	52.48	0.75	0.443	3P
831-01569F	25.33	16.16	1.40	0.125	101.31	64.66	0.70	0.499	3P
831-01570F	32.63	20.32	1.30	0.146	130.54	81.30	0.65	0.571	3P
831-01571F	50.02	33.06	0.92	0.277	200.10	132.24	0.46	1.108	3P
831-01572F	68.84	44.15	0.84	0.328	275.35	176.61	0.42	1.312	3P
831-01573F	101.31	65.50	0.68	0.501	405.22	262.02	0.34	2.005	3P
831-01574F	149.85	90.92	0.64	0.621	599.40	363.68	0.32	2.483	3P
831-01575F	200.10	116.51	0.60	0.731	800.38	466.03	0.30	2.925	3P
831-01576F	298.39	172.12	0.50	0.926	1193.55	688.50	0.25	3.702	3P
831-01577F	0.49	0.37	7.90	0.005	1.95	1.49	3.95	0.019	4P
831-01578F	0.76	0.56	7.20	0.006	3.05	2.24	3.60	0.023	4P
831-01579F	1.10	0.81	5.90	0.009	4.39	3.24	2.95	0.034	4P
831-01580F	1.95	1.42	4.60	0.014	7.81	5.69	2.30	0.055	4P
831-01581F	5.15	3.56	3.30	0.027	20.62	14.23	1.65	0.107	4P
831-01582F	7.81	5.15	3.00	0.033	31.23	20.61	1.50	0.131	4P
831-01583F	9.88	6.70	2.50	0.047	39.53	26.79	1.25	0.187	4P
831-01584F	14.76	9.52	2.30	0.057	59.05	38.09	1.15	0.228	4P
831-01585F	20.62	13.44	1.90	0.084	82.47	53.76	0.95	0.337	4P
831-01586F	25.65	17.17	1.60	0.115	102.60	68.68	0.80	0.461	4P
831-01587F	33.21	22.93	1.30	0.166	132.86	91.72	0.65	0.662	4P
831-01588F	48.80	32.21	1.20	0.201	195.20	128.83	0.60	0.805	4P
831-01589F	67.37	43.04	1.10	0.238	269.50	172.16	0.55	0.952	4P
831-01590F	99.09	69.54	0.72	0.565	396.38	278.15	0.36	2.259	4P
831-01591F	149.45	101.46	0.64	0.696	597.80	405.83	0.32	2.784	4P



**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Parallel				Series				Package Number
	Open Circuit Inductance <sup>1</sup> (uH 20%)	Full Load Inductance (uH Min)	Full Load Current (Adc)	DC Resistance ( Max)	Open Circuit Inductance <sup>1</sup> (uH 20%)	Full Load Inductance (uH Min)	Full Load Current (Adc)	DC Resistance ( Max)	
831-01592F	200.11	131.37	0.60	0.810	800.44	525.47	0.30	3.240	4P
831-01593F	298.93	188.03	0.54	1.003	1195.72	752.13	0.27	4.011	4P
831-01594F	0.40	0.26	5.50	0.005	1.60	1.05	2.75	0.020	1
831-01595F	0.63	0.41	4.50	0.006	2.50	1.63	2.25	0.024	1
831-01596F	0.90	0.56	4.20	0.007	3.60	2.24	2.10	0.028	1
831-01597F	2.03	1.00	4.10	0.010	8.10	4.01	2.05	0.040	1
831-01598F	4.90	2.66	2.30	0.030	19.60	10.64	1.15	0.122	1
831-01599F	8.10	4.08	2.00	0.039	32.40	16.34	1.00	0.157	1
831-01600F	10.00	4.85	1.90	0.044	40.00	19.40	0.95	0.176	1
831-01601F	14.40	8.74	1.10	0.080	57.60	34.96	0.55	0.319	1
831-01602F	19.60	11.54	1.00	0.146	78.40	46.15	0.50	0.583	1
831-01603F	25.60	16.35	0.74	0.167	102.40	65.42	0.37	0.668	1
831-01604F	32.40	19.84	0.72	0.293	129.60	79.37	0.36	1.171	1
831-01605F	50.63	29.34	0.64	0.366	202.50	117.38	0.32	1.462	1
831-01606F	67.60	39.73	0.54	0.516	270.40	158.92	0.27	2.064	1
831-01607F	99.23	58.72	0.44	0.784	396.90	234.88	0.22	3.137	1
831-01608F	148.23	85.16	0.38	0.965	592.90	340.64	0.19	3.861	1
831-01609F	202.50	107.60	0.37	1.142	810.00	430.39	0.19	4.567	1
831-01610F	302.50	191.38	0.22	1.431	1210.00	765.54	0.11	5.724	1
831-01611F	0.42	0.29	6.50	0.005	1.69	1.17	3.25	0.019	2
831-01612F	0.75	0.50	5.50	0.006	3.01	1.98	2.75	0.024	2
831-01613F	1.18	0.76	4.60	0.008	4.70	3.04	2.30	0.029	2
831-01614F	2.30	1.27	4.50	0.010	9.21	5.07	2.25	0.038	2
831-01615F	4.70	2.66	3.00	0.021	18.80	10.65	1.50	0.084	2
831-01616F	7.94	4.18	2.60	0.027	31.77	16.72	1.30	0.108	2
831-01617F	10.58	5.18	2.50	0.032	42.30	20.72	1.25	0.125	2
831-01618F	15.23	8.53	1.70	0.059	60.91	34.10	0.85	0.236	2
831-01619F	20.73	12.36	1.30	0.107	82.91	49.46	0.65	0.426	2
831-01620F	24.86	16.09	1.00	0.117	99.45	64.35	0.50	0.466	2
831-01621F	31.77	15.90	1.40	0.106	127.09	63.59	0.70	0.421	2
831-01622F	51.18	28.79	0.92	0.210	204.73	115.16	0.46	0.839	2
831-01623F	67.87	38.71	0.78	0.303	271.47	154.83	0.39	1.214	2
831-01624F	99.45	57.45	0.63	0.457	397.81	229.79	0.32	1.828	2
831-01625F	147.39	93.46	0.43	0.560	589.57	373.84	0.22	2.241	2
831-01626F	198.58	122.94	0.39	0.796	794.30	491.76	0.20	3.184	2
831-01627F	300.80	169.06	0.38	1.231	1203.20	676.24	0.19	4.929	2
831-01628F	0.38	0.27	6.00	0.005	1.54	1.08	3.00	0.020	3
831-01629F	0.60	0.42	5.00	0.006	2.40	1.67	2.50	0.024	3
831-01630F	0.86	0.57	4.80	0.007	3.46	2.28	2.40	0.028	3
831-01631F	1.94	1.05	4.70	0.010	7.78	4.22	2.35	0.040	3



**ELECTRICAL SPECIFICATION @ 25°C**

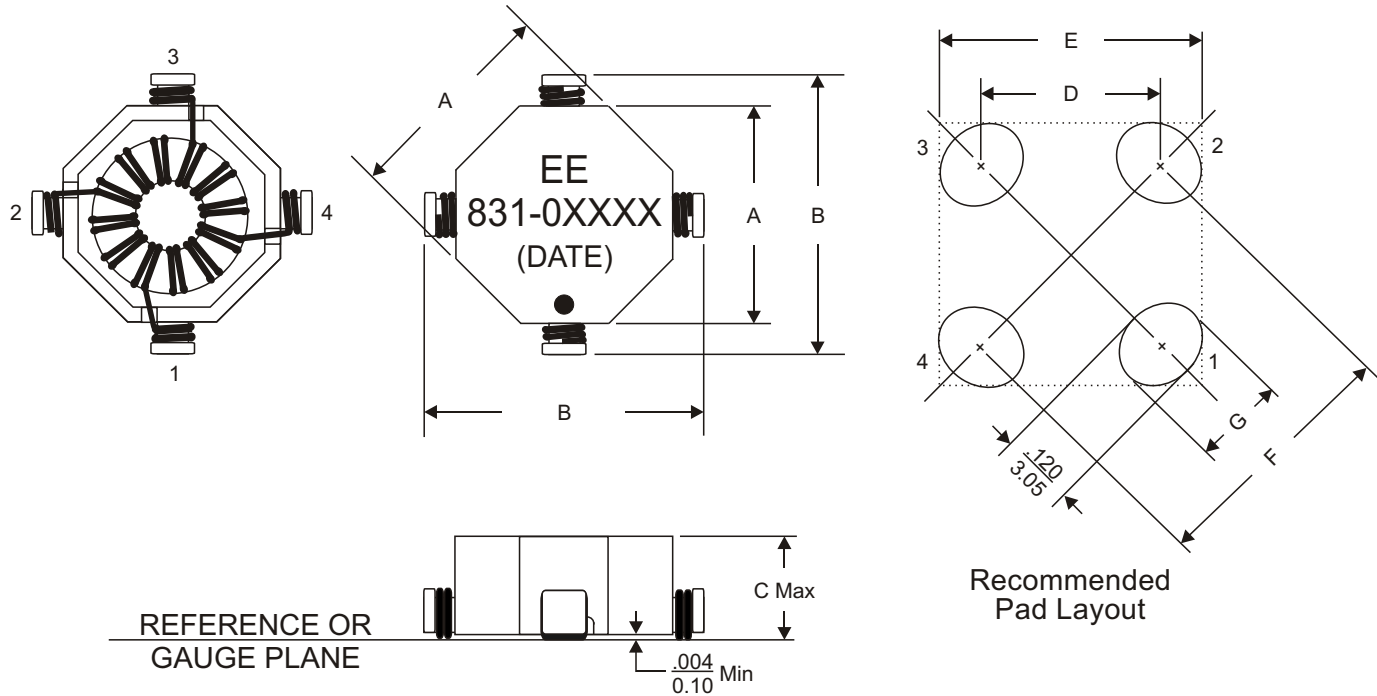
Part Number	Parallel				Series				Package Number
	Open Circuit Inductance (uH 20%) <sup>1</sup>	Full Load Inductance (uH Min)	Full Load Current (Adc)	DC Resistance ( Max)	Open Circuit Inductance (uH 20%) <sup>1</sup>	Full Load Inductance (uH Min)	Full Load Current (Adc)	DC Resistance ( Max)	
831-01632F	4.70	2.56	3.00	0.019	18.82	10.26	1.50	0.077	3
831-01633F	7.78	3.74	2.80	0.025	31.10	14.98	1.40	0.099	3
831-01634F	9.60	4.38	2.70	0.028	38.40	17.54	1.35	0.111	3
831-01635F	15.00	7.26	2.00	0.043	60.00	29.06	1.00	0.172	3
831-01636F	20.18	10.76	1.50	0.078	80.74	43.04	0.75	0.312	3
831-01637F	24.58	15.64	0.98	0.086	98.30	62.56	0.49	0.346	3
831-01638F	32.86	19.69	0.96	0.083	131.42	78.77	0.48	0.331	3
831-01639F	50.78	27.18	0.94	0.239	203.14	108.71	0.47	0.956	3
831-01640F	67.42	36.53	0.80	0.277	269.66	146.11	0.40	1.109	3
831-01641F	101.40	52.48	0.70	0.345	405.60	209.93	0.35	1.381	3
831-01642F	149.78	97.16	0.38	0.430	599.14	388.63	0.19	1.718	3
831-01643F	198.74	119.18	0.39	0.619	794.98	476.71	0.20	2.475	3
831-01644F	301.06	157.44	0.40	0.951	1204.22	629.75	0.20	3.083	3
831-01645F	0.44	0.32	7.00	0.004	1.76	1.29	3.50	0.016	4
831-01646F	0.78	0.55	6.00	0.005	3.14	2.21	3.00	0.020	4
831-01647F	1.23	0.85	5.00	0.006	4.90	3.41	2.50	0.024	4
831-01648F	1.76	1.06	5.90	0.007	7.06	4.24	2.95	0.028	4
831-01649F	4.90	2.59	4.40	0.014	19.60	10.37	2.20	0.056	4
831-01650F	8.28	4.29	3.50	0.018	33.12	17.14	1.75	0.072	4
831-01651F	9.60	4.82	3.40	0.020	38.42	19.28	1.70	0.079	4
831-01652F	14.16	6.76	3.00	0.024	56.64	27.03	1.50	0.096	4
831-01653F	19.60	10.68	2.10	0.055	78.40	42.73	1.05	0.220	4
831-01654F	25.92	13.32	2.00	0.064	103.68	53.27	1.00	0.254	4
831-01655F	33.12	16.82	1.80	0.072	132.50	67.27	0.90	0.287	4
831-01656F	50.18	25.03	1.50	0.111	200.70	100.11	0.75	0.444	4
831-01657F	67.08	35.29	1.20	0.158	268.32	141.15	0.60	0.630	4
831-01658F	99.23	54.56	0.92	0.303	396.90	218.25	0.46	1.210	4
831-01659F	148.23	77.17	0.82	0.372	592.90	308.69	0.41	1.488	4
831-01660F	200.70	111.08	0.64	0.545	802.82	444.32	0.32	2.180	4
831-01661F	298.12	147.92	0.62	0.672	1192.46	591.66	0.31	2.687	4

**Notes:**

1. Inductance is measured at 100kHz, 0.25Vrms.
2. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



MECHANICAL DIMENSIONS



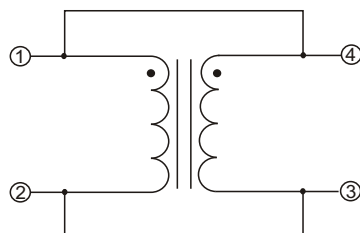
Package Number	A	B	C	D	E	F	G
1 or 1P	<u>.350</u> 8.89	<u>.450</u> 11.43	<u>.165</u> 4.19	<u>.277</u> 7.04	<u>.422</u> 10.72	<u>.392</u> 9.96	<u>.145</u> 3.68
2 or 2P	<u>.350</u> 8.89	<u>.450</u> 11.43	<u>.235</u> 5.97	<u>.277</u> 7.04	<u>.422</u> 10.72	<u>.392</u> 9.96	<u>.145</u> 3.68
3 or 3P	<u>.450</u> 11.43	<u>.550</u> 13.97	<u>.190</u> 4.83	<u>.348</u> 8.84	<u>.492</u> 12.50	<u>.492</u> 12.50	<u>.160</u> 4.06
4 or 4P	<u>.450</u> 11.43	<u>.550</u> 13.97	<u>.250</u> 6.35	<u>.348</u> 8.84	<u>.492</u> 12.50	<u>.492</u> 12.50	<u>.160</u> 4.06

Notes:

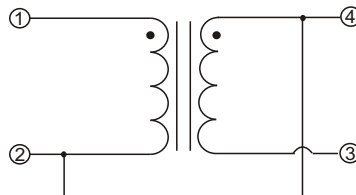
3. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in inches.
4. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .



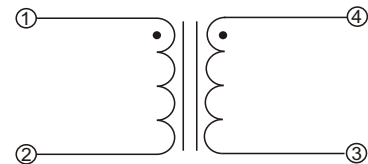
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PARALLEL



SERIES



TRANSFORMER

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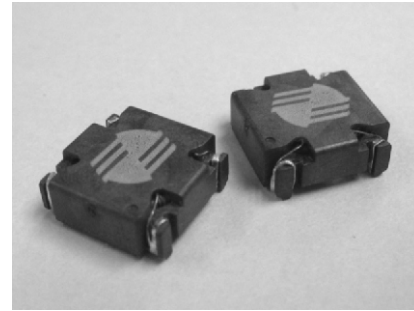
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-  Inductance range: 1.5 H to 139 H
-  Current Rating: up to 14.4A
-  Footprint: 18.2mm x 15.0mm maximum
-  Height: 7.6mm maximum
-  Operating temperature -40 C to +130 C
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

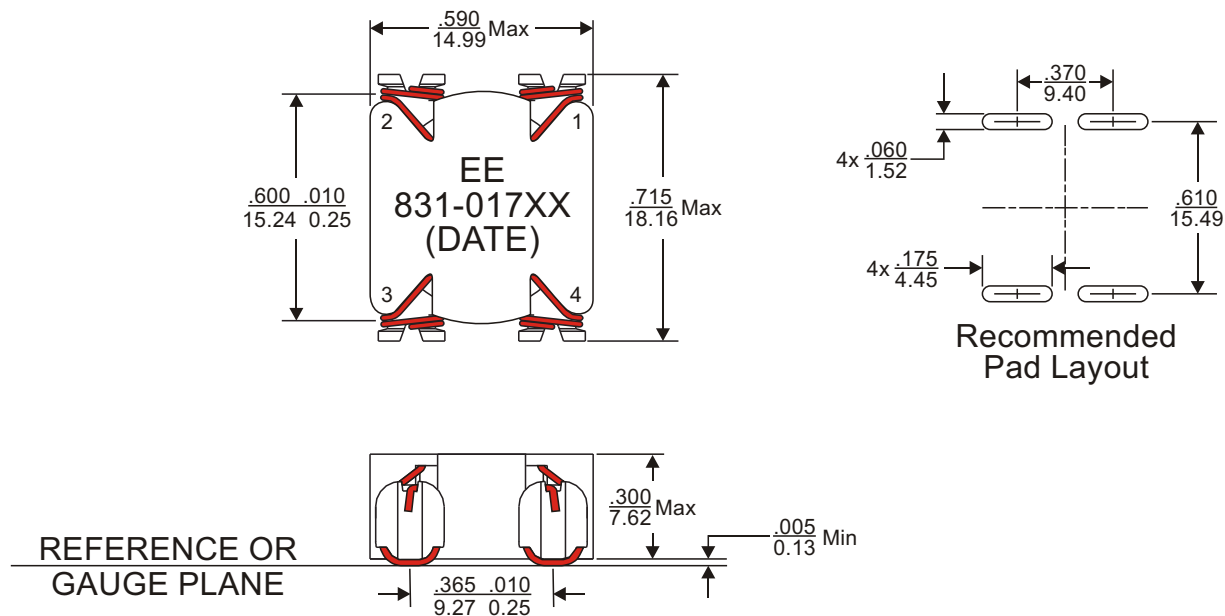
Part Number	Inductance @I <sub>rated</sub> (H Typ)	I <sub>rated</sub> (A)	DCR (m Typ)	ET (V- sec)	Storage Capacity (Joules)	Inductance @0Adc (H 20%)	100 Gauss ET <sub>100</sub> (V- sec)	1 Amp DC H <sub>1</sub> (Orsted)	Connection
831-01769F	1.5	14.40	4.41	4.80	159.01	2.2	1.71	3.77	Parallel
831-01766F	2.4	11.20	6.54	6.00	152.83	3.5	2.14	4.71	Parallel
831-01763F	4.2	8.20	10.47	7.85	142.57	5.9	2.78	6.12	Parallel
831-01761F	5.8	6.80	14.94	9.05	133.80	7.9	3.21	7.06	Parallel
831-01769F	6.1	7.20	17.60	9.60	159.01	9.0	3.42	7.53	Series
831-01759F	7.6	5.70	20.99	10.25	124.18	10.1	3.64	8.00	Parallel
831-01766F	9.7	5.60	26.20	12.00	152.83	14.0	4.28	9.42	Series
831-01758F	12.1	5.40	23.24	13.85	176.62	18.5	4.92	10.83	Parallel
831-01763F	17.0	4.10	41.90	15.70	142.57	23.7	5.56	12.24	Series
831-01757F	18.0	4.40	38.15	16.50	174.26	27.4	5.99	13.18	Parallel
831-01761F	23.1	3.40	59.70	18.10	133.80	31.5	6.42	14.12	Series
831-01756F	27.0	3.54	53.21	20.50	169.14	40.5	7.27	16.01	Parallel
831-01759F	30.6	2.85	84.00	20.50	124.18	40.5	7.27	16.01	Series
831-01755F	34.8	3.00	73.89	22.50	156.47	50.5	8.13	17.89	Parallel
831-01758F	48.5	2.70	93.00	27.70	176.62	74.1	9.84	21.66	Series
831-01757F	72.0	2.20	152.60	33.00	174.26	109.8	11.98	26.36	Series
831-01755F	139.1	1.50	295.60	45.00	156.47	202.2	16.26	35.78	Series
831-01756F	108.0	1.77	212.80	41.00	169.14	161.8	14.55	32.01	Series

**Notes:**

- For the copper loss(mW), calculate  $I_{DC}^2 \times R_N$ .
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



MECHANICAL DIMENSIONS

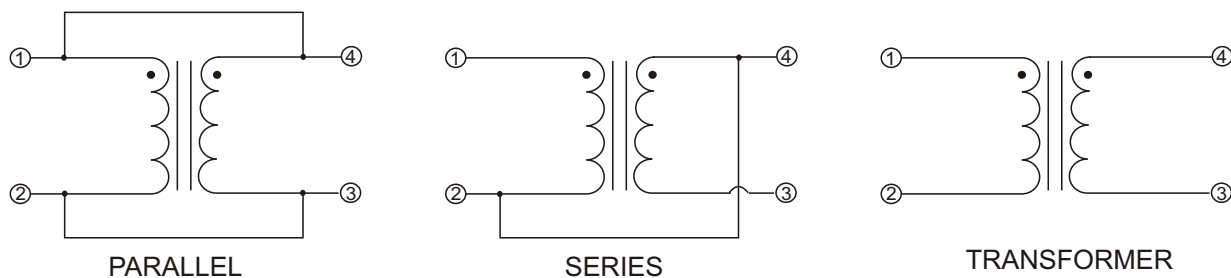


Notes:

3. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in inches.
4. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 4.2 typ.
Tape & Reel	: 300 / reel

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-  Inductance range: 1.1 H to 18.1 H
-  Current Rating: up to 38A
-  Footprint: 31.0mm x 25.4mm maximum
-  Height: 12.7mm maximum
-  Operating temperature -40 C to +130 C
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

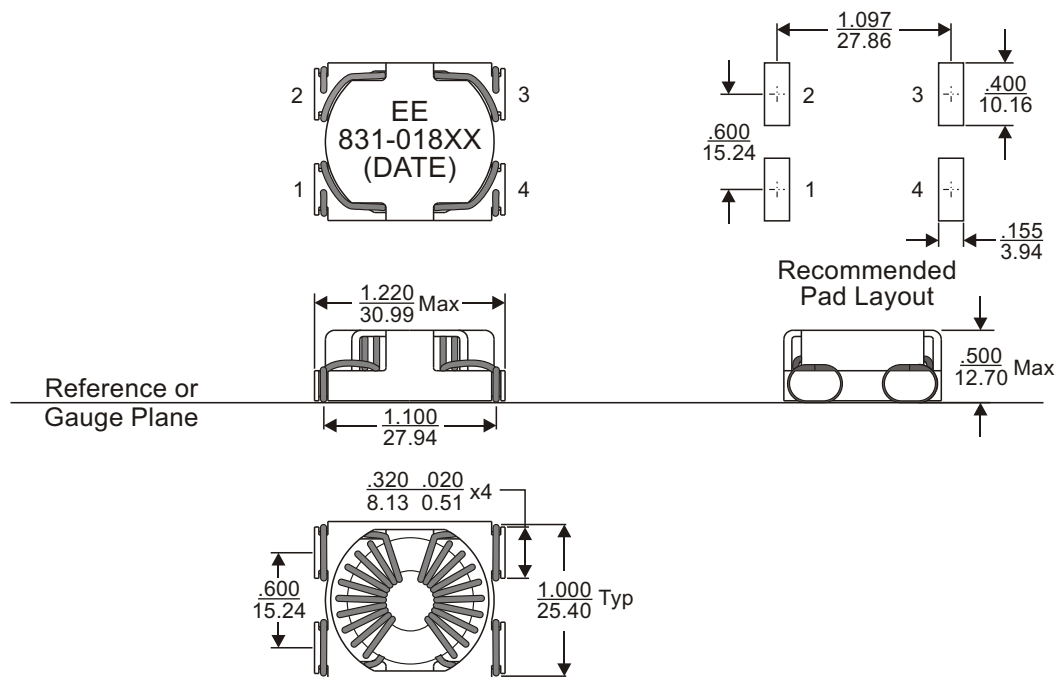
Part Number	Inductance @I <sub>rated</sub> (H)	I <sub>rated</sub> (A)	DCR (m Max)	Inductance <sup>1</sup> @0Adc (H)	Reference ET (V- sec)	Connection
831-01886F	1.1	38	1.1	2.1	4.20	Parallel
831-01885F	1.6	34	1.4	3.5	4.20	Parallel
831-01879F	2.45	27	2.2	5.1	6.00	Parallel
831-01878F	3.2	24	3.5	7.2	4.20	Parallel
831-01886F	4.3	19	4.4	8.4	8.40	Series
831-01877F	4.52	19	4.8	9.5	9.00	Parallel
831-01885F	6.4	17	5.6	13.8	8.40	Series
831-01879F	9.8	13.5	8.8	20.4	12.00	Series
831-01878F	12.8	12	13.8	28.7	8.40	Series
831-01877F	18.1	9.5	19.3	38.0	18.00	Series

**Notes:**

- Inductance is measured at 100kHz, 0.25Vrms.
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



MECHANICAL DIMENSIONS

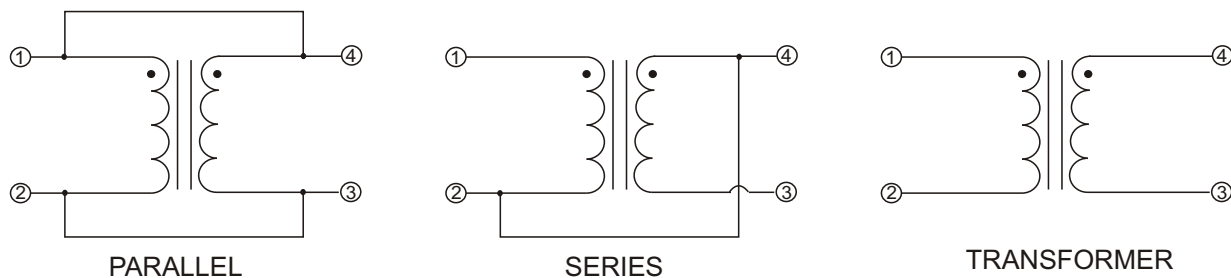


Notes:

3. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in inches.
4. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 18.7 typ.
Tape & Reel	: 80 / reel

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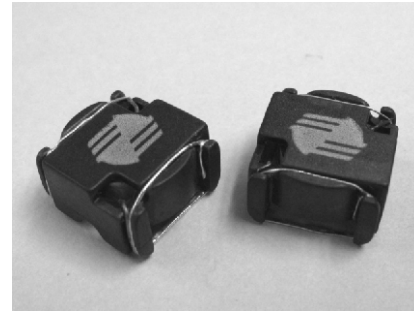
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-  Inductance range: 9.4 H to 439 H
-  Current Rating: up to 3.8A
-  Footprint: 12.7mm x 12.7mm maximum
-  Height: 5.5mm maximum
-  Operating temperature -40 C to +130 C
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

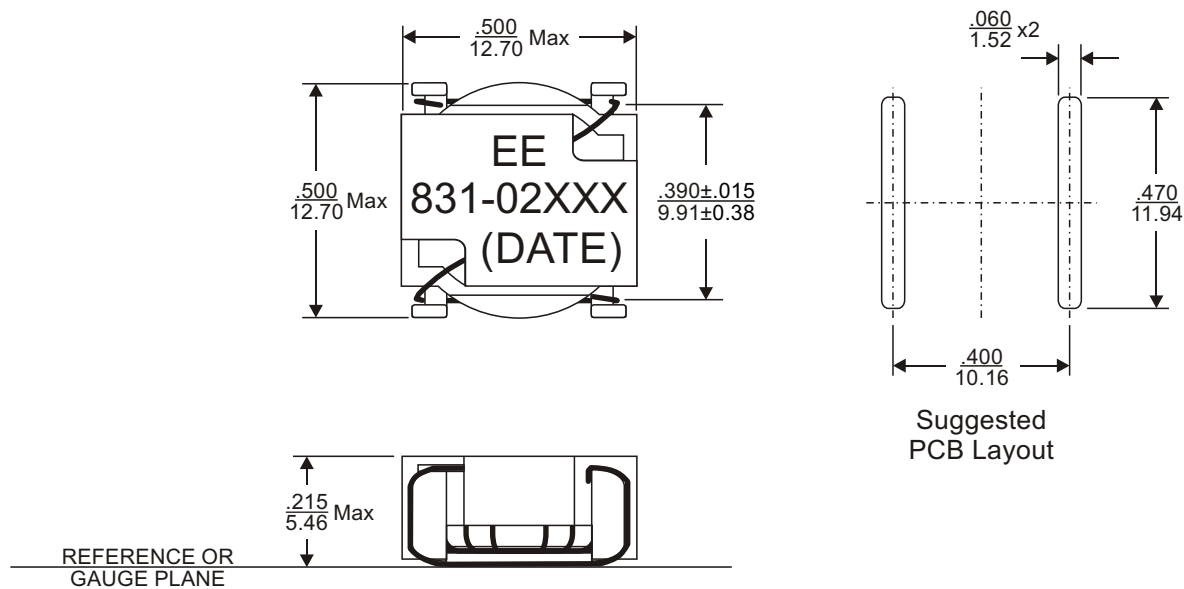
Part Number	Inductance @I <sub>rated</sub> ( H Typ)	I <sub>rated</sub> (A)	DCR (m Max)	ET (V- sec)	Inductance @0Adc ( H 20%)	100 Gauss ET <sub>100</sub> (V- sec)	1 Amp DC H <sub>1</sub> (Orsted)
831-02776F	9.4	3.80	31	15.2	10.4	2.65	11.95
831-02777F	13.3	3.13	46	18.8	14.6	3.13	14.12
831-02778F	23	2.43	75	24.3	25	4.10	18.46
831-02224F	50	1.65	139	37.0	56	6.15	27.69
831-02779F	75	1.35	208	44.3	83	7.47	33.67
831-02780F	90	1.23	283	49.2	100	8.19	36.93
831-02781F	137	0.99	445	59.4	152	10.12	45.61
831-02782F	200	0.81	673	71.3	220	12.17	54.85
831-02783F	305	0.65	972	85.8	331	14.94	67.34
831-02784F	439	0.53	1520	99.6	472	17.83	80.37

**Notes:**

1. For the copper loss(mW), calculate  $I_{DC}^2 \times R_N$ .
2. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



MECHANICAL DIMENSIONS

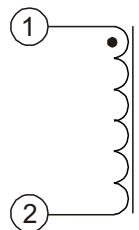


Notes:

3. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in inches.
4. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	:	1.5 typ.
Tape & Reel	:	500 / reel

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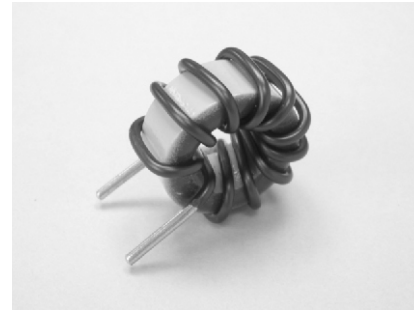
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-  Available in vertical mount
-  Characterized for general purpose use and ripple filters
-  Can be used as differential mode inductors in EMI filters
-  Can be used as SMPS averaging filter
-  Single-layer design
-  Operating temperature -40 C to +130 C
-  RoHS compliant



#### ELECTRICAL SPECIFICATION @ 25°C

Part Number	Reference Operating Values				Design Control Values				
	Inductance <sup>1</sup> Typical ( H )	I <sub>DC</sub> ( A )	E <sub>TOP</sub> ( V- Sec )	Energy <sup>2</sup> Storage ( J )	Inductance <sup>3</sup> No DC ( H ) 20%	Inductance <sup>4</sup> Test Volt. ( mV )	DCR <sup>5</sup> ( Max )	Coil Size Code	Lead Diameter (Inch) .003
831-00167F	20	2.0	52	40	32.8	33	.060	8	.020
831-00168F	25	2.6	30	85	20.7	22	.043	1	.020
831-00169F	50	2.6	50	169	45.7	45	.071	2	.020
831-00170F	100	2.6	90	338	94.1	90	.100	3	.020
831-00171F	35	2.6	55	118	28.4	36	.037	2	.025
831-00172F	70	3.0	85	315	61.0	73	.052	3	.025
831-00173F	145	3.0	140	653	141.8	140	.087	4	.025
831-00174F	285	3.0	300	1283	264.1	340	.140	5	.025
831-00175F	450	3.0	425	2025	436.3	500	.200	6	.025
831-00053F	67	3.6	130	434	90.7	110	.045	4	.032
831-00176F	165	4.0	240	1320	152.0	260	.070	5	.032
831-00177F	270	4.0	350	2160	263.9	400	.100	6	.032
831-00178F	40	4.0	70	320	37.9	57	.027	3	.032
831-00179F	22	5.0	44	275	20.3	37	.020	7	.032
831-00180F	100	5.0	200	1250	90.7	180	.034	5	.042
831-00181F	170	5.0	300	2125	159.7	310	.050	6	.042
831-00182F	35.6	5.0	100	445	55.6	88	.023	4	.042
831-00183F	95	7.0	225	2328	96.0	200	.025	6	.051
831-00184F	55	7.0	150	1348	49.1	100	.017	5	.051
831-00185F	55	10.0	175	2750	55.9	120	.013	6	.064

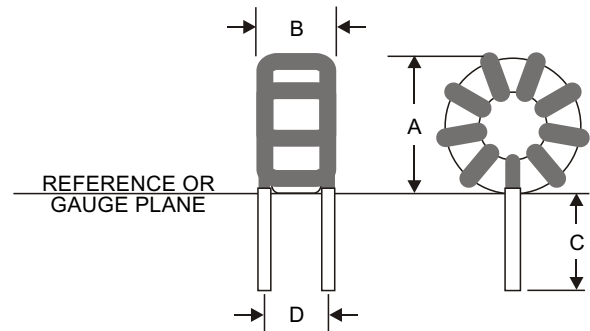
#### Notes:

1. Typical inductance occurs at I<sub>DC</sub> and E<sub>TOP</sub> values shown.
2. L<sup>2</sup>/2 rating is the ability of the inductor to store energy.
3. Inductance is tested at 20kHz.
4. Design control test voltage is critical, inductance increases with voltage.
5. DCR for vertical part measured close to coil.
6. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



## MECHANICAL DIMENSIONS

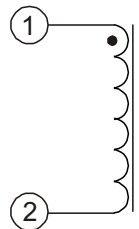
Size Code	A (Max)	B (Max)	C (+.125/-0.025) (+3.18/-0.64)	D (.020) (0.51)
1	.550 13.97	.250 6.35	.375 9.53	.180 4.57
2	.700 17.78	.380 9.65	.375 9.53	.280 7.11
3	.850 21.59	.410 10.41	.375 9.53	.280 7.11
4	1.050 26.67	.550 13.97	.375 9.53	.400 10.16
5	1.400 35.56	.700 17.78	.375 9.53	.500 12.70
6	1.650 41.91	.700 17.78	.375 9.53	.500 12.70
7	.850 21.59	.330 8.38	.875 22.23	.228 5.79
8	.640 16.26	.280 7.11	.875 22.23	.280 7.11



### Notes:

- All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in inches.
- Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

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-  Available in low profile
-  Characterized for general purpose use and ripple filters
-  Can be used as differential mode inductors in EMI filters
-  Can be used as SMPS averaging filter
-  Single-layer design
-  Operating temperature -40 C to +130 C
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Reference Operating Values				Design Control Values				
	Inductance <sup>1</sup> Typical ( H )	I <sub>DC</sub> ( A )	E <sub>TOP</sub> ( V- Sec )	Energy <sup>2</sup> Storage ( J )	Inductance <sup>3</sup> No DC ( H ) 20%	Inductance <sup>4</sup> Test Volt. ( mV )	DCR <sup>5</sup> ( m Max )	Coil Size Code	Lead Diameter (Inch) .003
831-00186F	50	2.6	50	169	45.7	45	71	1	.020
831-00187F	100	2.6	90	338	94.1	90	110	2	.020
831-00188F	70	3.0	85	315	61.0	73	52	2	.025
831-00189F	145	3.0	140	653	141.8	140	95.7	3	.025
831-00190F	100	3.6	130	648	90.7	110	49.5	3	.032
831-00191F	100	5.0	200	1250	90.7	180	34	4	.042
831-00192F	35.6	5.0	100	445	55.6	88	23	3	.042
831-00193F	55	7.0	150	1348	49.1	100	17	4	.051

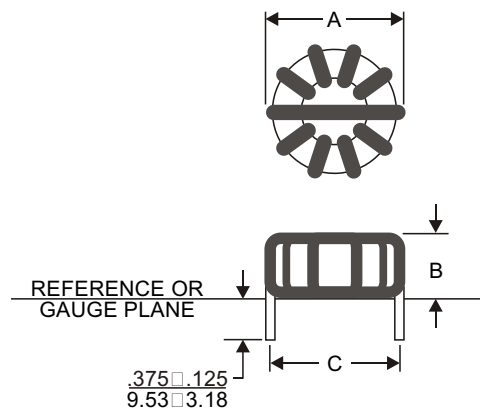
**Notes:**

1. Typical inductance occurs at I<sub>DC</sub> and E<sub>TOP</sub> values shown.
2. LI<sup>2</sup>/2 rating is the ability of the inductor to store energy.
3. Inductance is tested at 20kHz.
4. Design control test voltage is critical, inductance increases with voltage.
5. Add 10% more for low profile part.
6. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



## MECHANICAL DIMENSIONS

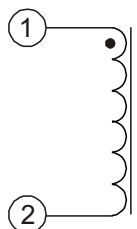
Size Code	A (Max)	B (Max)	C
1	<u>.700</u> 17.78	<u>.380</u> 9.65	<u>.530 .050</u> 13.46 1.27
2	<u>.850</u> 21.59	<u>.410</u> 10.41	<u>.720 .050</u> 18.29 1.27
3	<u>1.050</u> 26.67	<u>.550</u> 13.97	<u>.840 .020</u> 21.34 0.51
4	<u>1.400</u> 35.56	<u>.700</u> 17.78	<u>1.100 .100</u> 27.94 2.54



### Notes:

- All dimensions are specified in inches with higher precedence in inches.  
mm
- Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

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-  Inductance range: 10uH to 52uH
-  Current rating: up to 5.0A
-  Base material meets flammability requirements of UL 94-V0
-  Available in surface mount and through hole versions
-  Operating temperature -40 C to +130 C
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	In Circuit Operating Parameters			Nominal DCR ( )	Package Number		
	Nominal <sup>1</sup> Inductance (uH 20%)	Rated Current (A)	Max <sup>2</sup> E <sub>TOP</sub> (V- Sec)		Through Hole	Surface Mount	Lead Size (inches)
831-01815F	22.8	4.9	23.3	.036	1-4	--	.035
831-01816F	10.2	4.3	10.0	.026	1-1	--	.031
831-01817F	14.8	5.0	17.0	.023	1-3	--	.035
831-01818F	10	5.0	13.0	.025	1-2	--	.031
831-01819F	50	5.0	40.0	.050	1-5	--	.039
831-01820F	33	5.0	36.0	.047	1-5	--	.035
831-01821F	23	5.0	24.0	.026	1-4	--	.043
831-02797F	22.8	4.9	23.3	.036	--	3	--
831-02798F	10	4.3	10.0	.050	--	2-1	--
831-02799F	15	5.0	17.0	.027	--	2-2	--
831-02541F	11	5.0	13.0	.025	--	2-2	--
831-01887F	52 <sup>3</sup>	5.0	40.0	.025	--	4	--
831-01888F	36 <sup>3</sup>	5.0	36.0	.019	--	4	--
831-01889F	24.7 <sup>3</sup>	5.0	24.0	.013	--	4	--

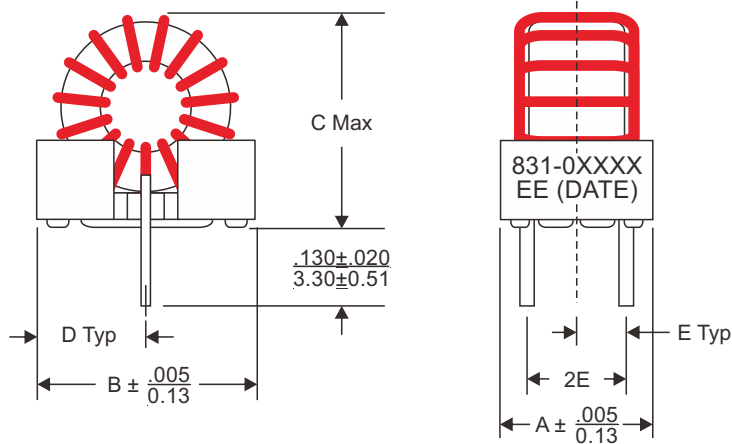
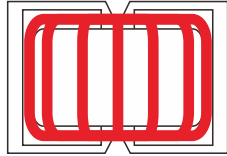
**Notes:**

- Inductance is measured at 100kHz, 0.10Vrms.
- E<sub>TOP</sub> is rated at 260kHz.
- Series connection (Pins 2-4 connected).
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



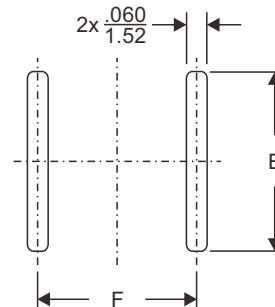
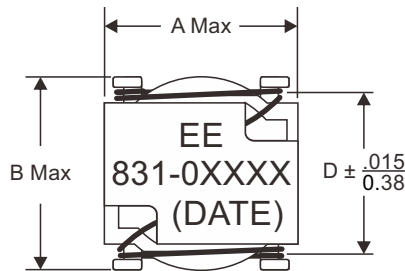
MECHANICAL DIMENSIONS

Package 1

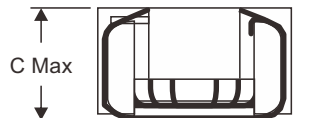


Package Number	A	B	C	D	E
1-1	<u>.350</u> 8.89	<u>.580</u> 14.73	<u>.715</u> 18.16	<u>.290</u> 7.37	<u>.110</u> 2.80
1-2	<u>.450</u> 11.43	<u>.650</u> 16.51	<u>.700</u> 17.78	<u>.325</u> 8.26	<u>.150</u> 3.81
1-3	<u>.460</u> 11.68	<u>.670</u> 17.02	<u>.750</u> 19.05	<u>.335</u> 8.51	<u>.150</u> 3.81
1-4	<u>.450</u> 11.43	<u>.830</u> 21.08	<u>.950</u> 24.13	<u>.415</u> 10.54	<u>.150</u> 3.81
1-5	<u>.600</u> 15.24	<u>.950</u> 24.13	<u>1.350</u> 34.29	<u>.475</u> 12.07	<u>.225</u> 5.72

Package 2



Recommended Pad Layout



REFERENCE OR  
GAUGE PLANE

	PKG 2.1	PKG 2.2
Weight (in gram)	: 3.6 typ	4.8 typ
Tape & Reel	: 200 / reel	200 / reel

Package Number	A	B	C	D	E	F
2-1	<u>.600</u> 15.24	<u>.620</u> 15.75	<u>.390</u> 9.91	<u>.500</u> 12.70	<u>.550</u> 13.97	<u>.510</u> 12.95
2-2	<u>.670</u> 17.02	<u>.700</u> 17.78	<u>.390</u> 9.91	<u>.580</u> 14.73	<u>.620</u> 15.75	<u>.590</u> 14.99

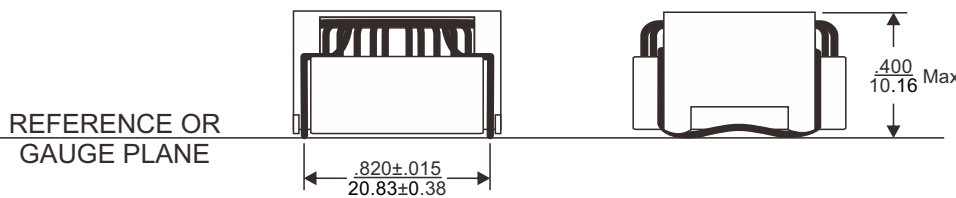
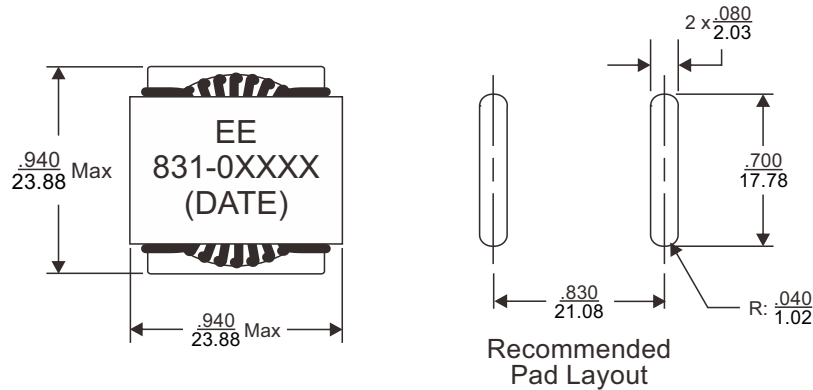
Notes:

- All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in inches.
- Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .



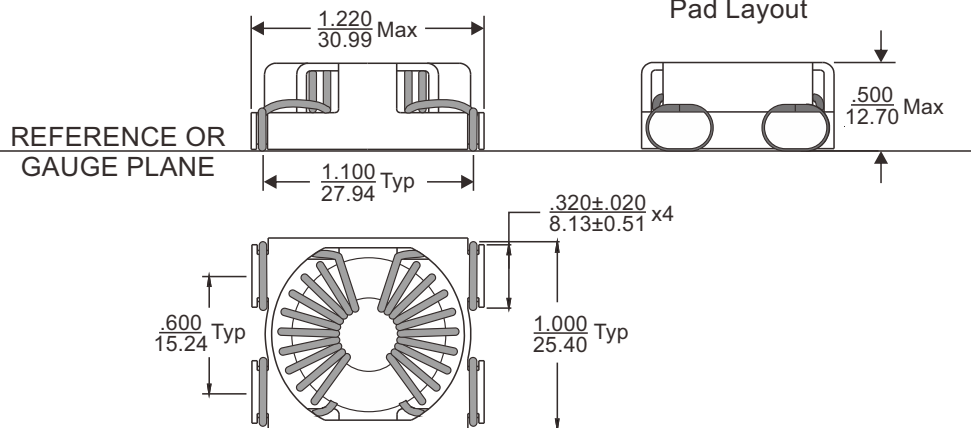
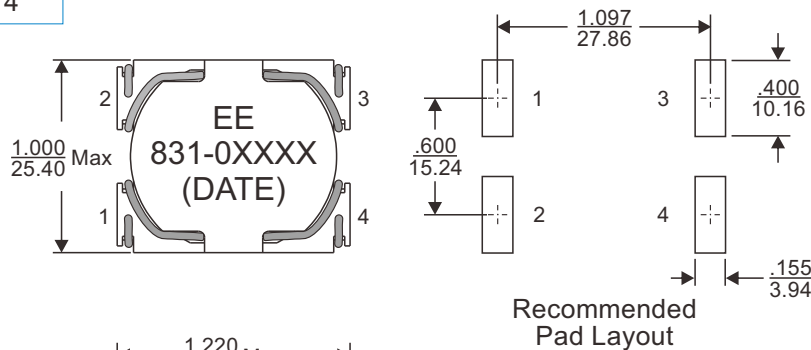
MECHANICAL DIMENSIONS

Package 3



Weight (in gram)	: 12.1 typ.
Tape & Reel	: 100 / reel

Package 4



Weight (in gram)	: 18 typ.
Tape & Reel	: 80 / reel

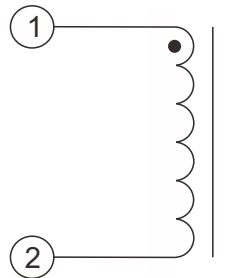
Notes:

- All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in inches.
- Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .



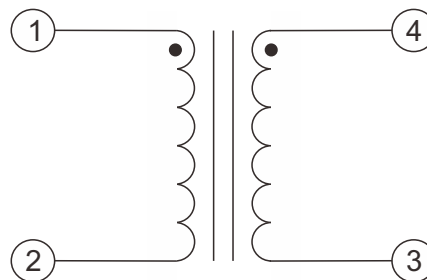
SCHEMATICS

Package 1 to 3



SCHEMATICS

Package 4



FOR MORE INFORMATION, PLEASE CONTACT

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-  Inductance range: 17uH to 377uH
-  Current rating: up to 4.5A
-  Base material meets flammability requirements of UL 94-V0
-  Available in surface mount and through hole versions
-  Operating temperature -40 C to +130 C
-  RoHS compliant versions are available



**ELECTRICAL SPECIFICATION @ 25°C**

THT Part Number	SMT Part Number	In Circuit Operating Parameters			Nominal DCR ( )	Package Number		
		Nominal <sup>1</sup> Inductance (uH 20%)	Rated Current (A)	Max <sup>2</sup> ETop (V- Sec)		Through Hole	Surface Mount	Lead Size (inches)
831-01773F	831-00132F	259	0.13	23.1	3.4	1-1	3-1	--
831-01774F	831-00133F	178	0.16	16.5	2.8	1-1	3-1	--
831-01775F	831-00134F	118	0.20	13.2	1.8	1-1	3-1	--
831-01776F	831-00135F	79	0.25	9.9	1.5	1-1	3-1	--
831-01777F	831-00136F	55	0.30	6.6	1.0	1-1	3-1	--
831-01778F	831-00137F	39	0.34	6.6	0.8	1-1	3-1	--
831-01779F	831-00138F	26	0.45	6.6	0.62	1-1	3-1	--
831-01780F	831-00139F	374	0.20	75.9	2.7	1-2	3-2	--
831-01781F	831-00140F	256	0.25	33	2.2	1-2	3-2	--
831-01782F	831-00141F	176	0.30	26.4	1.4	1-2	3-2	--
831-01783F	831-00142F	118	0.38	19.8	1.2	1-2	3-2	--
831-01784F	831-00143F	78	0.46	16.5	0.8	1-2	3-2	--
831-01785F	831-00144F	55	0.56	13.2	0.5	1-2	3-2	--
831-01786F	831-00145F	39	0.68	9.9	0.3	1-2	3-2	--
831-01787F	831-00146F	26	0.84	6.6	0.2	1-2	3-2	--
831-01788F	831-00147F	17	1.02	6.6	0.1	1-2	3-2	--
831-01789F	831-00148F	375	0.36	75.9	1.3	1-3	3-3	--
831-01790F	831-00149F	252	0.44	49.5	0.9	1-3	3-3	--
831-01791F	831-00150F	173	0.54	36.3	0.6	1-3	3-3	--
831-01792F	831-00151F	115	0.67	29.7	0.4	1-3	3-3	--
831-01793F	831-00152F	78	0.82	23.1	0.3	1-3	3-3	--
831-01794F	831-00153F	54	1.00	16.5	0.2	1-3	3-3	--
831-01795F	831-00154F	38	1.20	13.2	0.1	1-3	3-3	--
831-01796F	831-00155F	26	1.48	9.9	0.1	1-3	3-3	--
831-01797F	831-00156F	18	1.81	9.9	0.06	1-3	3-3	--
831-01798F	831-00157F	377	0.68	75.9	1.0	1-4	3-4	--
831-01799F	831-00158F	248	0.83	72.6	0.6	1-4	3-4	--
831-01800F	831-00159F	168	1.02	56.1	0.4	1-4	3-4	--



**ELECTRICAL SPECIFICATION @ 25°C**

THT Part Number	SMT Part Number	In Circuit Operating Parameters			Nominal DCR ( )	Package Number		
		Nominal <sup>1</sup> Inductance (uH 20%)	Rated Current (A)	Max <sup>2</sup> E <sub>TOP</sub> (V- Sec)		Through Hole	Surface Mount	Lead Size (inches)
831-01801F	831-00160F	112	1.26	42.9	0.3	1-4	3-4	--
831-01802F	831-00161F	77	1.54	33	0.2	1-4	3-4	--
831-01803F	831-00162F	53	1.87	26.4	0.13	1-4	3-4	--
831-01804F	831-00163F	37	2.24	19.8	0.10	1-4	3-4	--
831-01805F	831-00164F	24	2.74	16.5	0.07	1-4	3-4	--
831-01806F	831-00165F	17	3.0	13.2	0.05	2-1	3-4	.023
831-01807F	831-00780F	250	1.5	72.6	0.23	2-3	4	.023
831-01808F	831-02800F	168	1.81	75.9	0.18	2-3	4	.023
831-01809F	831-02223F	114	2.22	62.7	0.10	2-3	4	.025
831-01810F	831-02801F	77	2.7	52.8	0.09	2-3	4	.025
831-01326F	831-01318F	53	3.0	42.9	0.08	2-3	4	.025
831-01811F	831-02218F	38	3.0	29.7	0.05	2-3	4	.028
831-01812F	831-00166F	25	3.0	19.8	0.04	2-2	3-5	.028
831-01813F	--	167	2.5	75.9	0.14	2-4	--	.028
831-01327F	--	110	3.0	75.9	0.09	2-4	--	.031
831-01814F	831-02802F	77	3.0	59.4	0.08	2-3	4	.025
831-01317F	--	19	4.5	32 <sup>3</sup>	0.02	2-3	--	.035

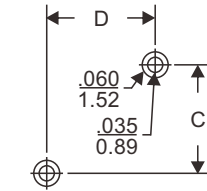
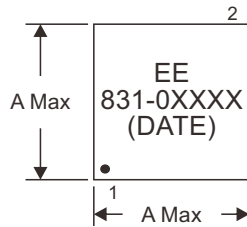
**Notes:**

1. Inductance is measured at 100kHz, 0.10Vrms.
2. E<sub>TOP</sub> is rated at 150kHz except where designated.
3. E<sub>TOP</sub> is rated at 100kHz.
4. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

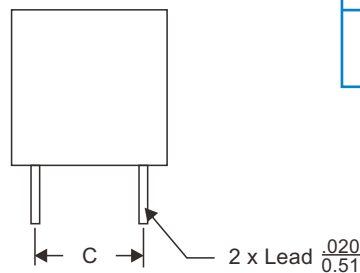
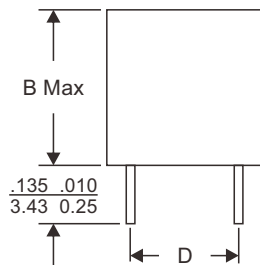


MECHANICAL DIMENSIONS

Package 1



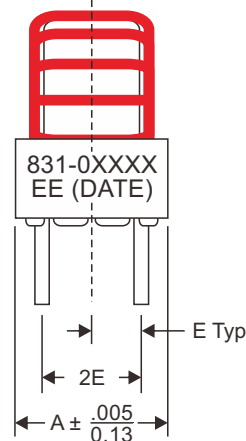
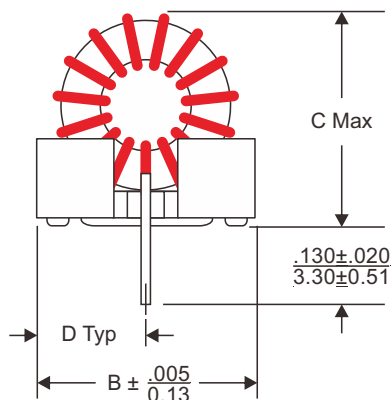
Package Number	A	B	C	D
1-1	.360 9.14	.310 7.87	.250 6.35	.250 6.35
1-2	.400 10.16	.300 7.62	.300 7.62	.300 7.62
1-3	.495 12.57	.375 9.53	.375 9.52	.375 9.52
1-4	.635 16.13	.365 9.27	.500 12.70	.300 7.62



Package 2



Package Number	A	B	C	D	E
2-1	.340 8.64	.580 14.73	.650 16.51	.290 7.37	.110 2.79
2-2	.450 11.43	.650 16.51	.700 17.78	.325 8.26	.150 3.81
2-3	.450 11.43	.830 21.08	.950 24.13	.415 10.54	.150 3.81
2-4	.610 15.49	.970 24.64	1.10 27.94	.475 12.07	.225 5.72



Notes:

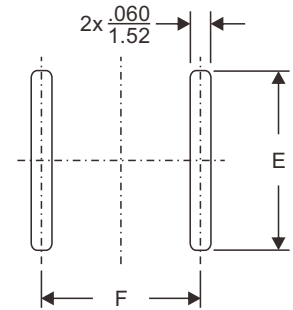
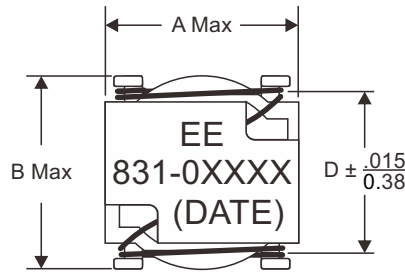
5. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in inches.
6. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .



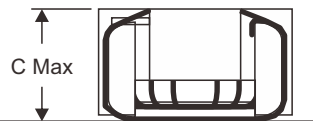
MECHANICAL DIMENSIONS

Package 3

Package Number	A	B	C	D	E	F
3-1	$\frac{.340}{8.64}$	$\frac{.340}{8.64}$	$\frac{.270}{6.86}$	$\frac{.260}{6.60}$	$\frac{.300}{7.62}$	$\frac{.270}{6.86}$
3-2	$\frac{.435}{11.05}$	$\frac{.440}{11.18}$	$\frac{.360}{9.14}$	$\frac{.350}{8.89}$	$\frac{.400}{10.16}$	$\frac{.360}{9.14}$
3-3	$\frac{.565}{14.35}$	$\frac{.570}{14.48}$	$\frac{.360}{9.14}$	$\frac{.450}{11.43}$	$\frac{.520}{13.21}$	$\frac{.460}{11.68}$
3-4	$\frac{.600}{15.24}$	$\frac{.620}{15.75}$	$\frac{.390}{9.91}$	$\frac{.500}{12.70}$	$\frac{.550}{13.97}$	$\frac{.510}{12.95}$
3-5	$\frac{.670}{17.02}$	$\frac{.700}{17.78}$	$\frac{.390}{9.91}$	$\frac{.580}{14.73}$	$\frac{.620}{15.75}$	$\frac{.590}{14.99}$

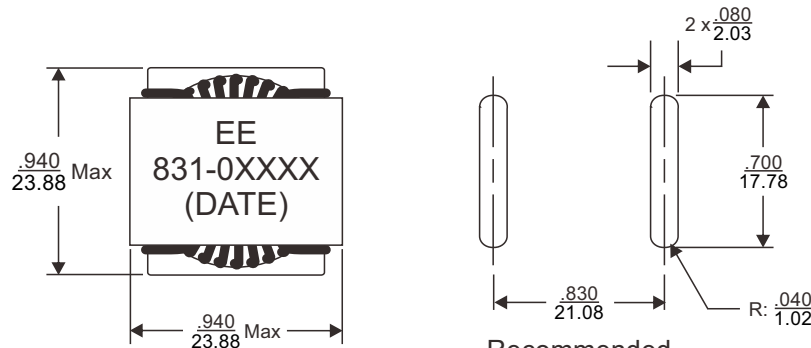


Suggested  
PAD Layout

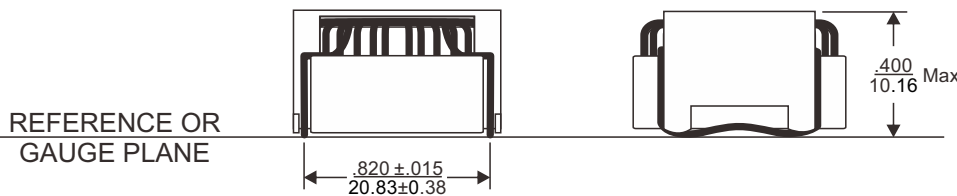


REFERENCE OR  
GAUGE PLANE

Package 4



Recommended  
Pad Layout



REFERENCE OR  
GAUGE PLANE

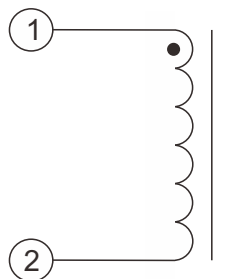
Weight (in gram)	: 12.1 typ.
Tape & Reel	: 100 / reel

Notes:

- All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in inches.
- Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .



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-  1500Vdc Isolation between Gate and Drive
-  Operation frequency: 50kHz minimum
-  Basic insulation (1.4mm creepage / clearance) and operational insulation is available
-  Operating temperature -40°C to +125°C.
-  RoHS compliant
-  Custom design is also available



**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Turns Ratio	Primary Inductance (uH Min)	Leakage Inductance (uH Max)	DCR Primary ( Max)	DCR Secondary ( Max)	Hipot	Max V. sec	Package Size (L x W x H) (mm Max)
<b>Operational Insulation</b>								
834-00002F	1 : 1 : 1	3300	0.70	1.60	1.60	1500Vdc	45.1	9.0 x 8.6 x 7.6
834-00003F	1 : 1 : 1	300	0.50	2.00	2.00	1500Vdc	23.8	8.0 x 6.6 x 5.3
834-00006F	1 : 1 : 1	1140	0.65	0.75	0.75	1500Vdc	12.7	8.6 x 6.7 x 3.6
834-00007F	1 : 1	600	17.00	0.80	0.80	1500Vdc	9.3	7.2 x 5.1 x 3.8
834-00012F	1 : 1	785	0.46	0.60	0.60	1500Vdc	9.7	9.1 x 6.6 x 2.5
<b>Basic Insulation (1.4mm creepage and clearance between Primary and Secondary)</b>								
834-00011F	2 : 1 : 1	1200	0.60	0.91	0.46	1500Vrms	27.2	9.0 x 8.6 x 7.6
834-00022F	1 : 1	1200	0.50	0.91	0.91	1500Vrms	27.2	9.0 x 8.6 x 7.6
834-00023F	2.5 : 1 : 1	1200	0.68	0.91	0.38	1500Vrms	27.2	9.0 x 8.6 x 7.6

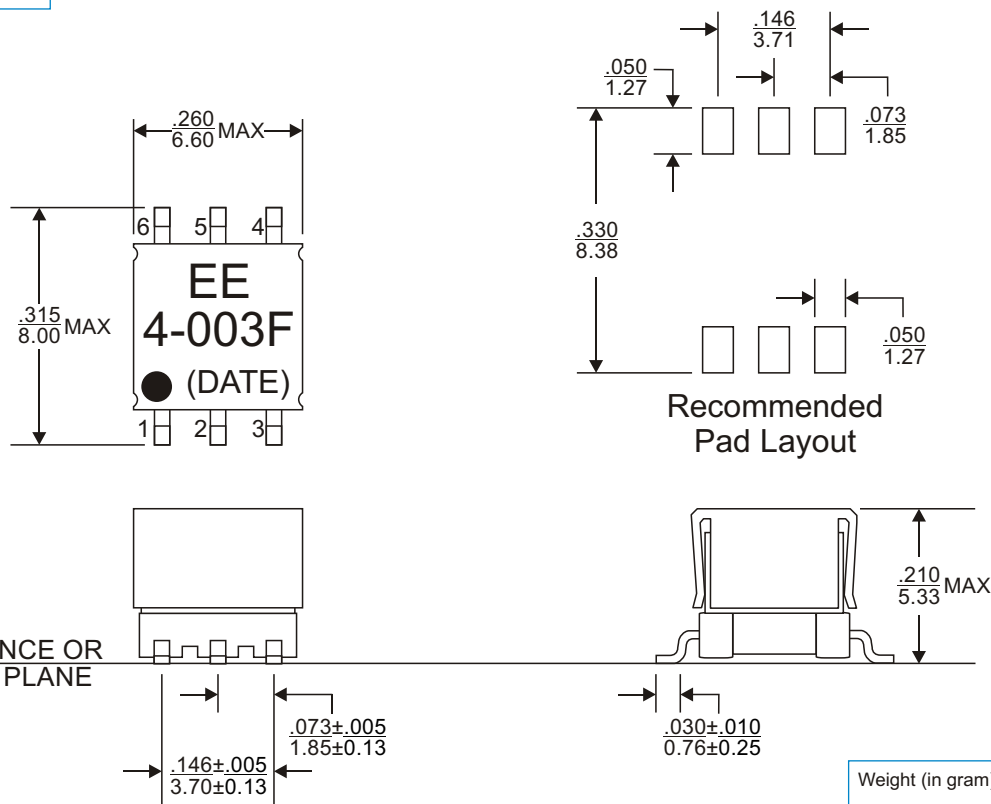
**Notes:**

- Ordering Information: 834-000xxFc.  
834-000xxF = Part number (F : stands for RoHS compliant).  
c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).
- The maximum volt- sec rating limits the peak flux density to 2200 Gauss when used in a unipolar drive application. For bi-polar drive application, a maximum volt- sec of two times this rating is acceptable.
- Leakage inductance is measured at primary terminals with all secondaries shorted.
- Operating temperature range: -40°C to +130°C. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



MECHANICAL DIMENSIONS

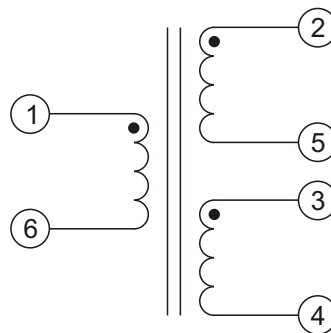
834-00003F



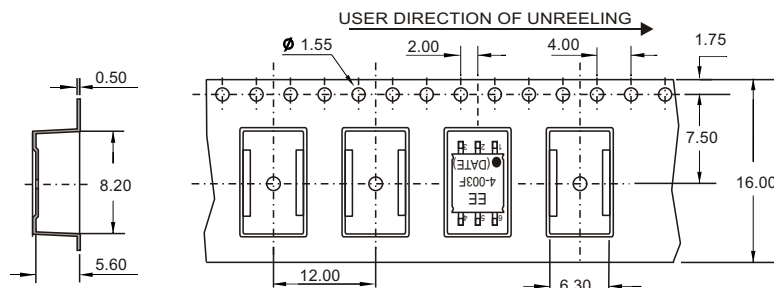
Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 0.50 typ.
Tape & Reel	: 800 / reel

SCHEMATICS



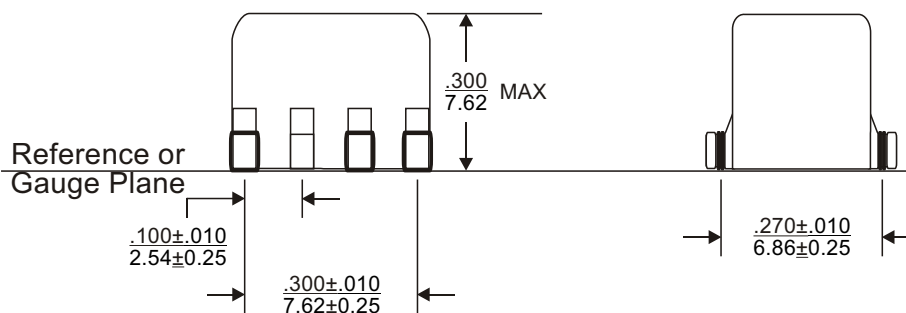
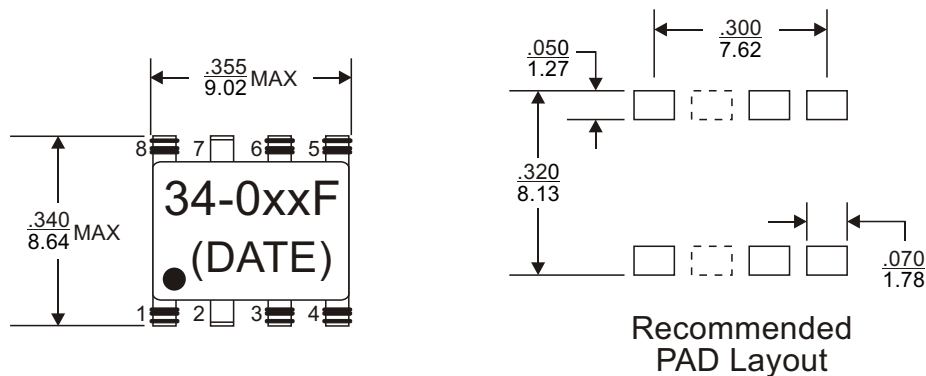
PACKAGING





# MECHANICAL DIMENSIONS

834-00002F / 834-00011F / 834-00022F / 834-00023F

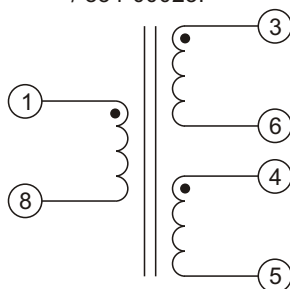


Weight (in gram)	: 0.65 typ.
Tape & Reel	: 600 / reel

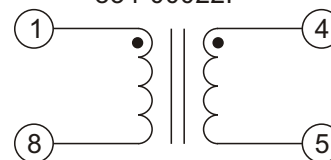
Unless otherwise specified, all tolerances are  $\pm .010$  /  $\pm 0.25$ .

# SCHEMATICS

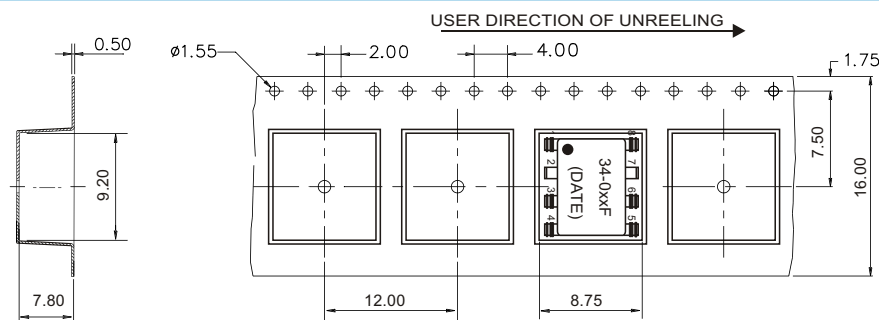
834-00002F / 834-00011F  
/ 834-00023F



834-00022F



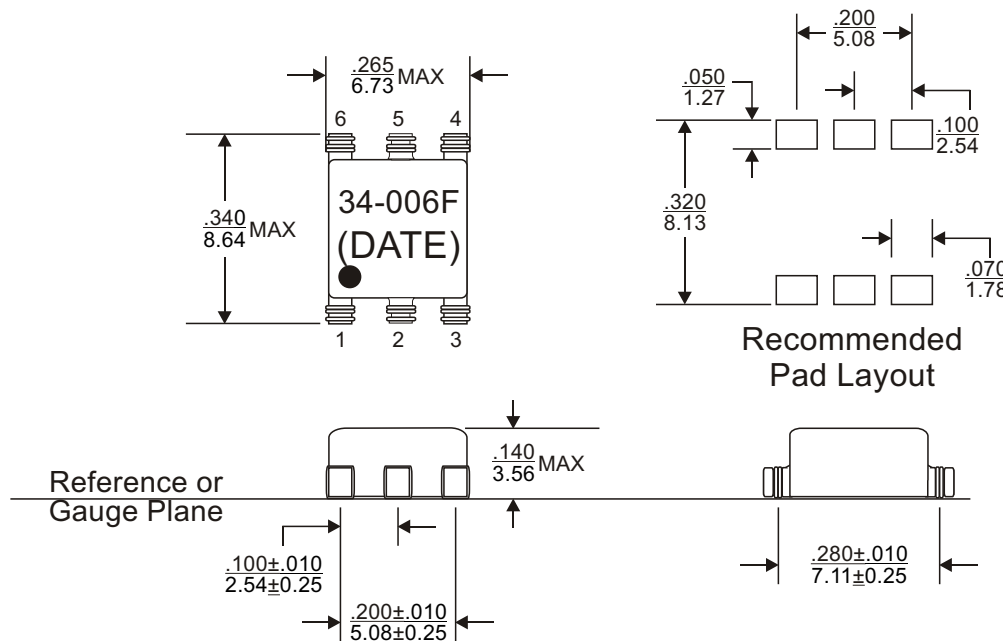
# PACKAGING





MECHANICAL DIMENSIONS

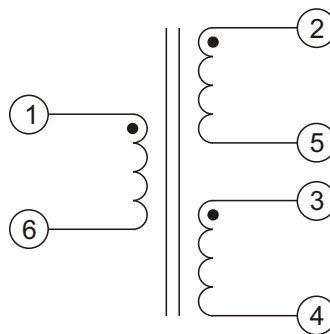
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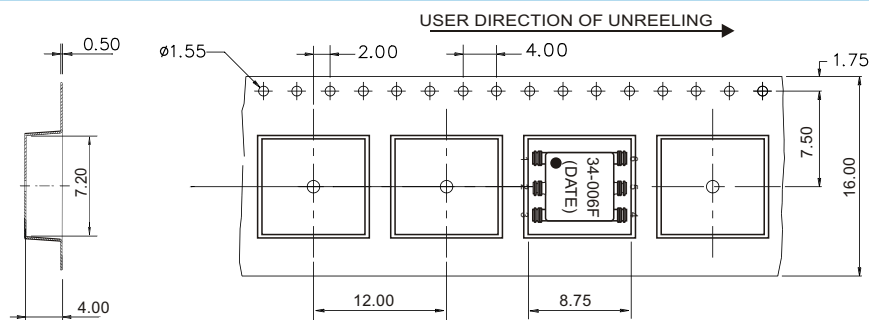
Unless otherwise specified, all tolerances are  $\pm \frac{.010}{.025}$ .

Weight (in gram)	: 0.23 typ.
Tape & Reel	: 1200 / reel

SCHEMATICS

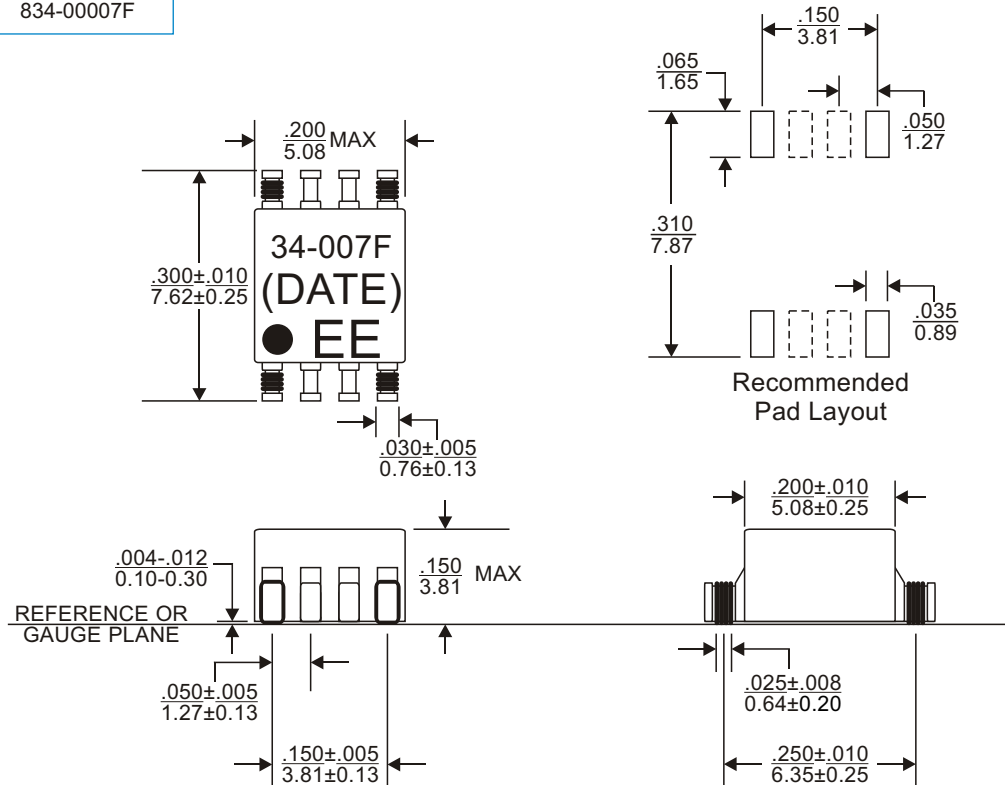


PACKAGING



## MECHANICAL DIMENSIONS

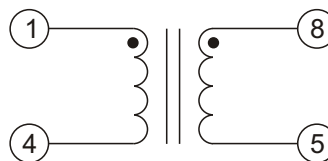
834-00007F



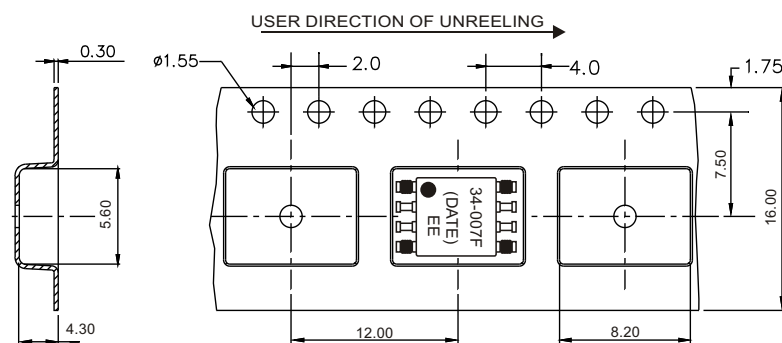
Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	:	0.65 typ.
Tape & Reel	:	1100 / reel

## SCHEMATICS



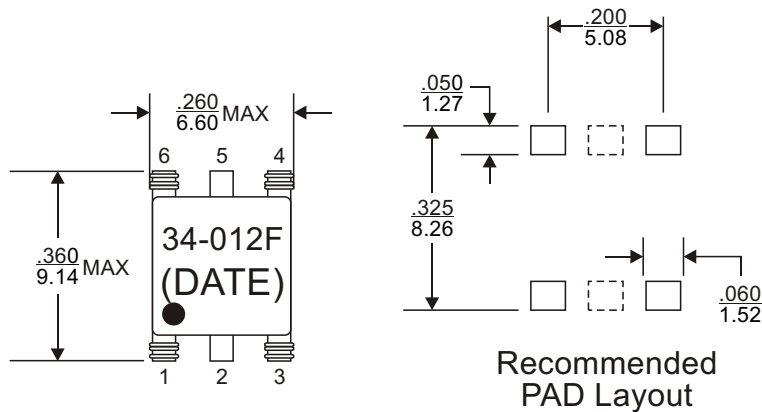
## PACKAGING





MECHANICAL DIMENSIONS

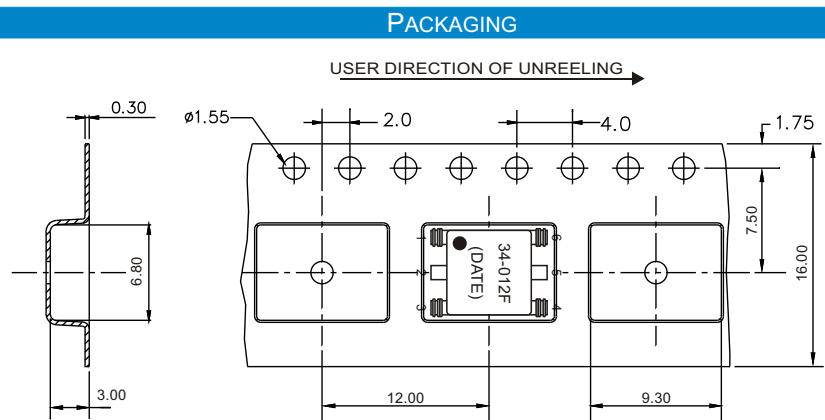
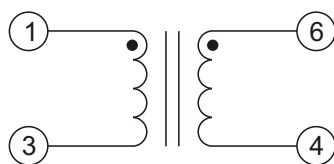
834-00012F



Unless otherwise specified, all tolerances are  $\pm .010$  /  $\pm .025$ .

Weight (in gram)	: 0.15 typ.
Tape & Reel	: 1800 / reel

SCHEMATICS



FOR MORE INFORMATION, PLEASE CONTACT

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Email: eempl@eleceltek.com

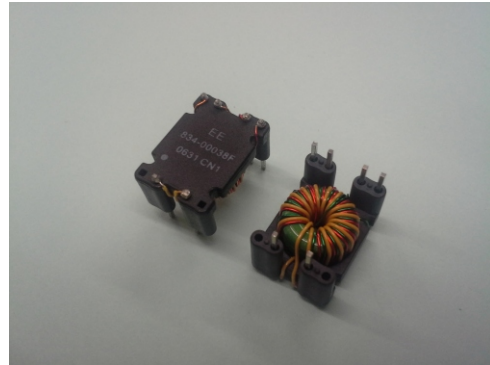
Website: <http://www.eleceltek.com> / [www.eemagnetic.com](http://www.eemagnetic.com)

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Tel: (852) 2954 3333 • Fax: (852) 2954 3304



-  High Isolation between Gate and Drive
-  Operation frequency: 50kHz minimum
-  Basic insulation (2.0mm creepage / clearance) and operational insulation is available
-  Operating temperature -40°C to +155°C.
-  RoHS compliant
-  Custom design is also available



**ELECTRICAL SPECIFICATION @ 25°C**

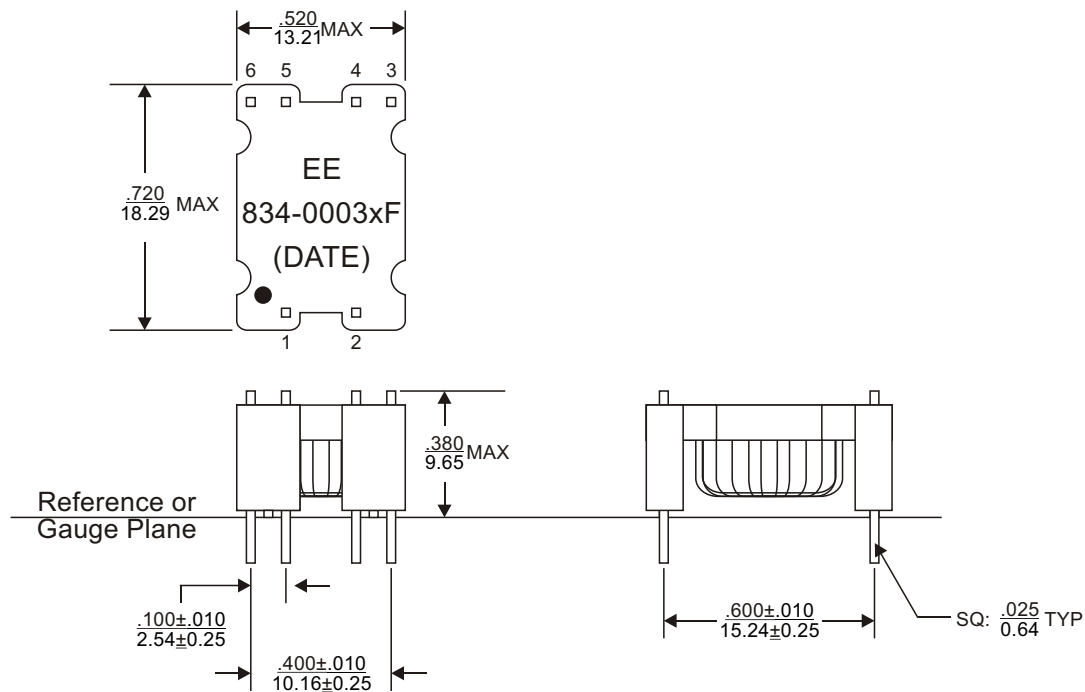
Part Number	Turns Ratio (± 2%)	Primary Inductance (uH Min)	Leakage Inductance (uH Max)	DCR Primary (m Max)	DCR Secondary (m Max)	Hipot	Package Size (L x W x H) (mm Max)
834-00032F	1 : 1 : 1	495	0.30	300.0	300.0	4242Vdc	18.29 x 13.21 x 14.2
834-00038F <sup>6</sup>	1 : 1 : 1	860	0.30	300.0	300.0	4242Vdc	18.29 x 13.21 x 14.2

**Notes:**

- Ordering Information: 834-000xxFc.  
834-000xxF = Part number (F : stands for RoHS compliant).  
c = Packaging Code (No code = Tray Packaging).
- Primary Inductance is tested at 100kHz, 100mV.
- Leakage inductance is measured at primary terminals with all secondaries shorted.
- Gate drive current: Peak current is 5A for 0.5usec and average current is 1A maximum.
- Operating freq.:100kHz typ. with voltage applied to primary will be up to 15V for up to 10usec.
- Heat shrinkable tube is used for “wrapping” the wound core in order to ensure the clearance(4mm min.) and creepage(5mm min.) are maintained between the pins(which are connected to the insulated wire) and the magnet wire/core.



**MECHANICAL DIMENSIONS**

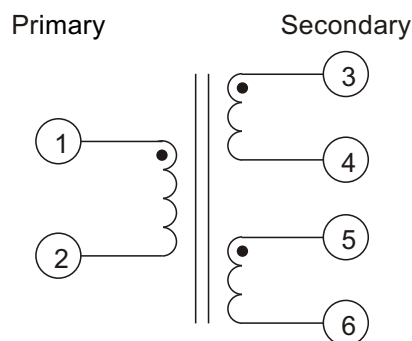


**Notes:**

7. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.  
8. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 3.2 typ.
Tray Packaging	: 63pcs / tray

**SCHEMATICS**



**FOR MORE INFORMATION, PLEASE CONTACT**

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-  Act as feedback elements linking the output and pulse control circuitry, allow low-cost regulation of switch-mode power supplies
-  Fully encapsulated with a frequency of 200kHz maximum
-  2500Vrms isolation between Pri and Sec
-  1 turn Primary peak current: 15A maximum
-  Operating temperature -0°C to +70°C
-  RoHS compliant versions are available



**ELECTRICAL SPECIFICATION @ 25°C**

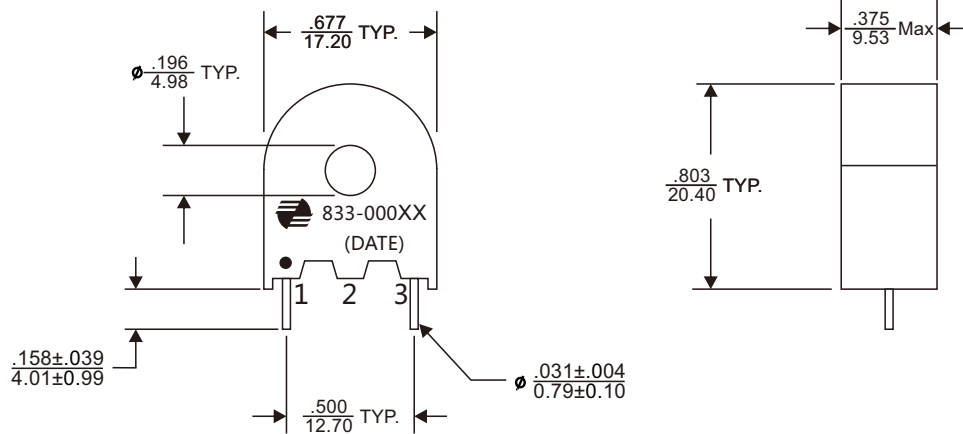
Part Number	RoHS Part Number	Inductance (MH MIN)	Current Rating (A)	Turns Ratio (Pri:Sec)	DCR (Ω) MAX	V x t (V-us) Max
833-00017	- <sup>1</sup>	5.0	15	1:50	0.65	175
833-00018	- <sup>1</sup>	22.0	15	1:100	1.30	350
833-00019	- <sup>1</sup>	94.5	15	1:200	4.50	700

**Notes:**

1. For ROHS compliant versions please contact EEMPL.
2. Inductance is tested at 10kHz, 10mV.
3.  $V \times t$ :  $V = R_t \times I_s$  and  $t = 1/2f$ , where  
 $R_t(\Omega)$  is recommended terminating resistance.  
 $I_s(A)$  is the secondary current.  
 $f(Hz)$  is the frequency.



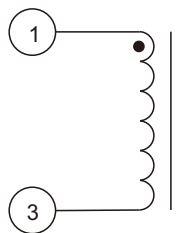
MECHANICAL DIMENSIONS



Notes:

4. All dimensions are specified in inches with higher precedence in mm.
5. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

SCHEMATIC



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-  Designed for switching power supply applications
-  1 turn primary peak current is 20A maximum
-  Frequency range: 20kHz to 200kHz
-  Transformer meets IEC950 insulation requirements
-  Operating temperature 0°C to +150°C
-  RoHS compliant versions are available

**ELECTRICAL SPECIFICATION @ 25°C**

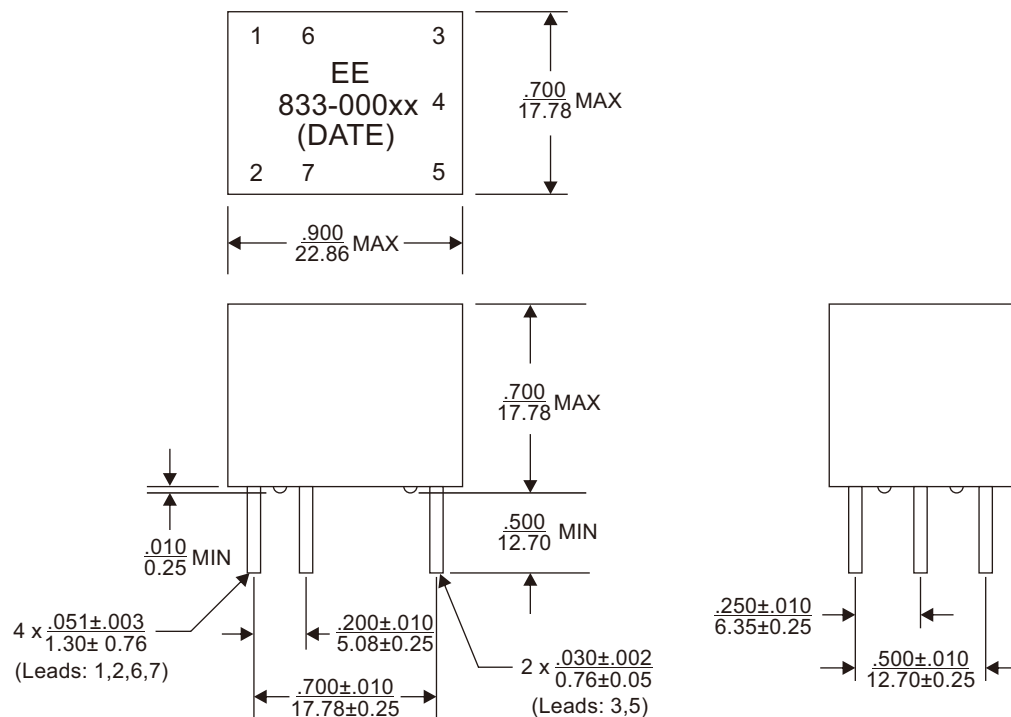
Transformer With 2x1turn Primary		Transformer With 1turn Primary		Inductor Without Primary		Turns	Secondary <sup>2</sup> Inductance	Inductance Test voltage	Rs	Rt	Primary <sup>3</sup> Unipolar Amp uSec Rating	Primary <sup>3</sup> Bipolar Amp uSec Rating
Part Number	Schem.	Part Number	Schem.	Part Number	Schem.	Ns	(mH) Min.	(V)	(Ω) MAX	(Ω) NOM	Max.	Max.
—	—	833-00020 <sup>1</sup>	A	833-00036 <sup>1</sup>	E	50	5	0.5	0.7	50	150	300
—	—	833-00021 <sup>1</sup>	A	833-00037 <sup>1</sup>	E	100	20	1.0	1.4	100	300	600
833-00030 <sup>1</sup>	C	833-00022 <sup>1</sup>	A	833-00038 <sup>1</sup>	E	200	80	2.0	4.5	200	600	1200
833-00032 <sup>1</sup>	D	—	—	833-00039 <sup>1</sup>	F	50CT	5	0.5	0.7	50	150	300
833-00033 <sup>1</sup>	D	—	—	833-00040 <sup>1</sup>	F	100CT	20	1.0	1.4	100	300	600
833-00034 <sup>1</sup>	D	833-00026 <sup>1</sup>	B	833-00041 <sup>1</sup>	F	200CT	80	2.0	4.5	200	600	1200
—	—	833-00027 <sup>1</sup>	B	—	—	300CT	180	3.0	11.0	300	900	1800

**Notes:**

- For ROHS compliant version please contact EEMPL.
- Inductance is tested at 15.75kHz.
- Maximum rating specified with rated secondary terminating resistance and 1 turn primary.
- Amp-microsecond(AuSec.) rating of primary equals Volt-microsecond(V-uSec.) rating of secondary when secondary is terminated in rated resistance, (Amp-microseconds is equal to the product of a square pulse of current in amps, times the current pulse width in microseconds).

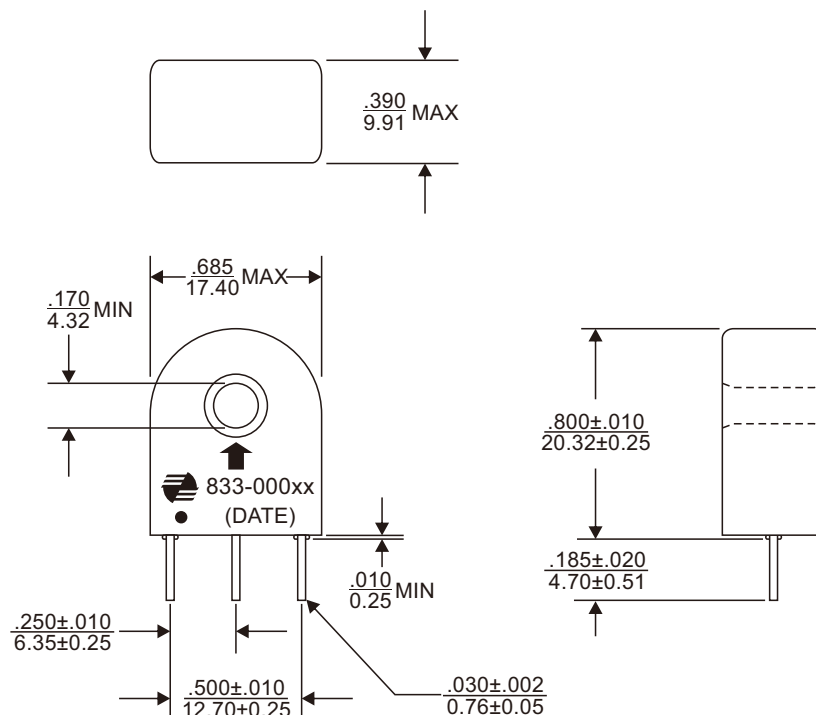


MECHANICAL DIMENSIONS



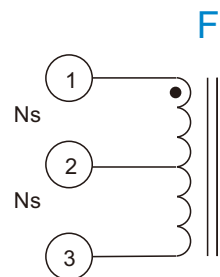
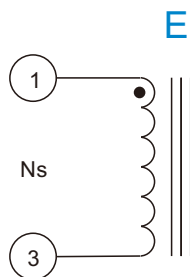
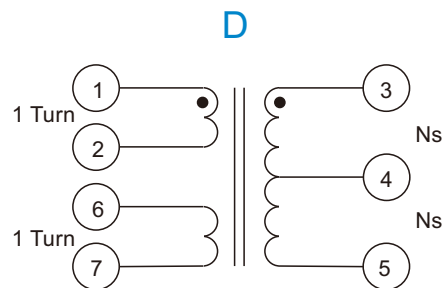
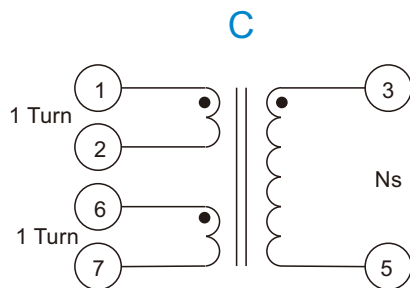
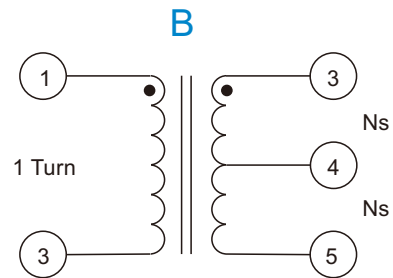
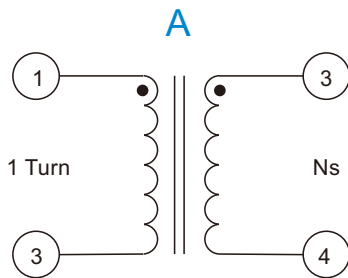
Notes:

- All dimensions are specified in inches with higher precedence in mm.  
mm
- Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .





SCHEMATIC



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Hong Kong








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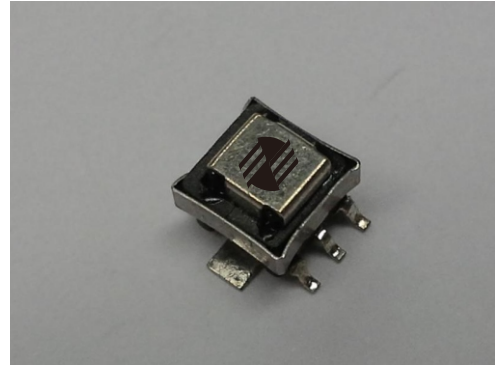
Email: eempl@eleceltek.com

Website: <http://www.eleceltek.com> / [www.eemagnetic.com](http://www.eemagnetic.com)

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-  Low profile (Height: 5.3mm Max)
-  Footprint: 8.4mm x 7.2mm Max
-  High turns ratio and low primary DCR
-  Current rating: up to 10A ( $I_{in}$ )
-  Frequency range: 50kHz to nearly 1MHz
-  Operating temperature -40°C to +125°C
-  Hipot: 500V isolation between winding



**ELECTRICAL SPECIFICATION @ 25°C**

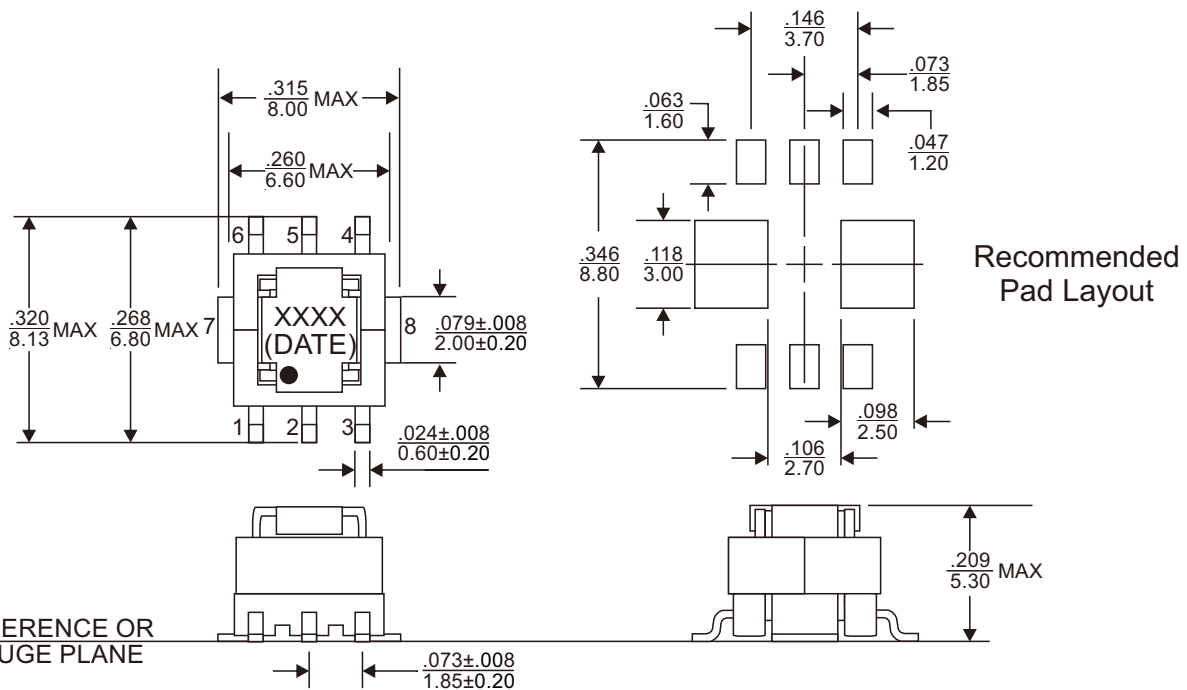
Part Number	Turns Ratio	Secondary Inductance ( $\mu$ H MIN)	Terminating resistance $R_T$ <sup>4</sup> (Ohms)	DCR (m $\Omega$ MAX)		Volt-time product <sup>5</sup> (V- $\mu$ sec)
				Primary (8-7)	Secondary (6-4)	
833-00088F	1:20	81	2.0	0.7	400	16
833-00089F	1:30	180	3.0	0.7	870	24
833-00090F	1:40	320	4.0	0.7	1140	32
833-00091F	1:50	500	5.0	0.7	1500	41
833-00092F	1:60	730	6.0	0.7	1980	49
833-00093F	1:70	980	7.0	0.7	4750	57
833-00094F	1:100	2000	10.0	0.7	5500	81
833-00095F	1:125	3000	12.5	0.7	6500	101

**Notes:**

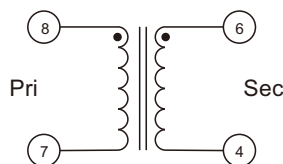
- Ordering Information: 833-000xxFc.  
833-000xxF = Part number (F : stands for RoHS compliant).  
c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).
- Inductance is tested at 0.1Vrms, 100kHz .
- The maximum current rating is based upon temperature rise of the DC current which will cause a typical temperature rise of 40°C with no airflow when both one turn windings connected in parallel.
- Terminating resistance ( $R_T$ ) value is based on 1 Volt output with 10 Amps flowing through the primary. Varying terminating resistance increases or decreases output Voltage/Ampere according to the following equation:  
$$R_T \text{ (Ohms)} = V_{out} \times N_{sec} / I_{in}$$
- Maximum volt-time product for the secondary.
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



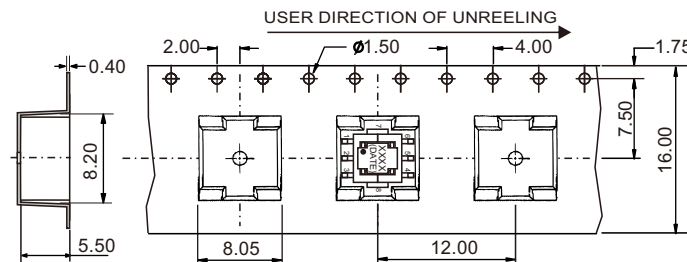
**MECHANICAL DIMENSIONS**



**SCHEMATIC**



**PACKAGING**



FOR MORE INFORMATION, PLEASE CONTACT

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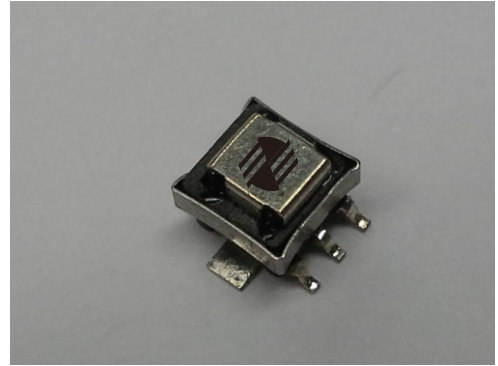
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-  Low profile (Height: 5.3mm Max)
-  Footprint: 8.4mm x 7.2mm Max
-  High turns ratio and low primary DCR
-  Current rating: up to 10A ( $I_{in}$ )
-  Frequency range: 50kHz to nearly 1MHz
-  Operating temperature -40°C to +125°C
-  Hipot: 500V isolation between winding



**ELECTRICAL SPECIFICATION @ 25°C**

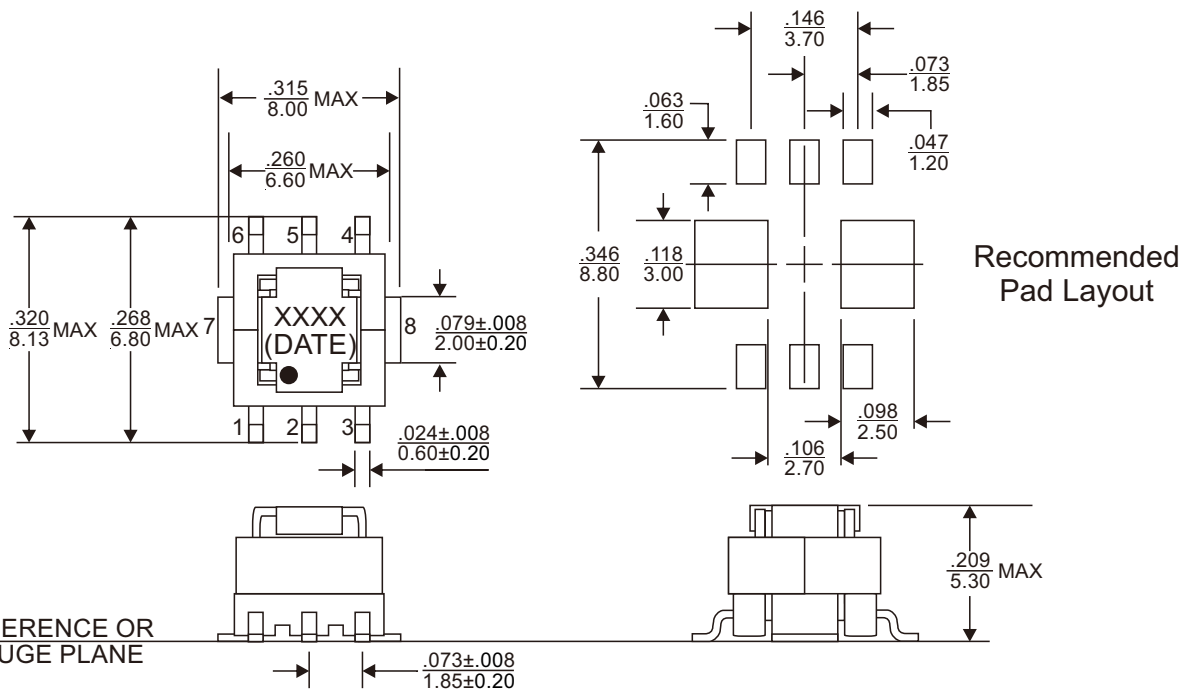
Part Number	Turns Ratio	Secondary Inductance ( $\mu$ H MIN)	Terminating resistance $R_T$ <sup>4</sup> (Ohms)	DCR (m $\Omega$ MAX)		Volt-time product <sup>5</sup> (V- $\mu$ sec)
				Primary (8-7)	Secondary (1-3)	
833-00006F	1:20	81	2.0	0.7	400	16
833-00007F	1:30	180	3.0	0.7	870	24
833-00008F	1:40	320	4.0	0.7	1140	32
833-00009F	1:50	500	5.0	0.7	1500	41
833-00010F	1:60	730	6.0	0.7	1980	49
833-00011F	1:70	980	7.0	0.7	4750	57
833-00012F	1:100	2000	10.0	0.7	5500	81
833-00013F	1:125	3000	12.5	0.7	6500	101

**Notes:**

- Ordering Information: 833-000xxFc.  
833-000xxF = Part number (F : stands for RoHS compliant).  
c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).
- Inductance is tested at 0.1Vrms, 100kHz .
- The maximum current rating is based upon temperature rise of the DC current which will cause a typical temperature rise of 40°C with no airflow when both one turn windings connected in parallel.
- Terminating resistance ( $R_T$ ) value is based on 1 Volt output with 10 Amps flowing through the primary. Varying terminating resistance increases or decreases output Voltage/Ampere according to the following equation:  
$$R_T \text{ (Ohms)} = V_{out} \times N_{sec} / I_{in}$$
- Maximum volt-time product for the secondary.
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



### MECHANICAL DIMENSIONS

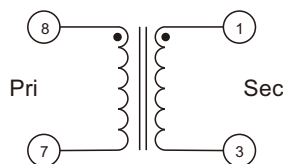


#### Notes:

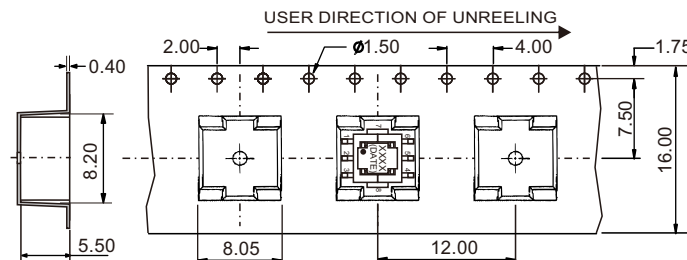
7. All dimensions are specified in inches with higher precedence in mm.
8. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .
9. Coplanarity:  $\frac{.004}{0.10}$  max.

Weight (in gram)	: 0.35 typ.
Tape & Reel	: 900 / reel

### SCHEMATIC



### PACKAGING



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#### HEADQUARTER

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Website: <http://www.eleceltek.com> / [www.eemagnetic.com](http://www.eemagnetic.com)

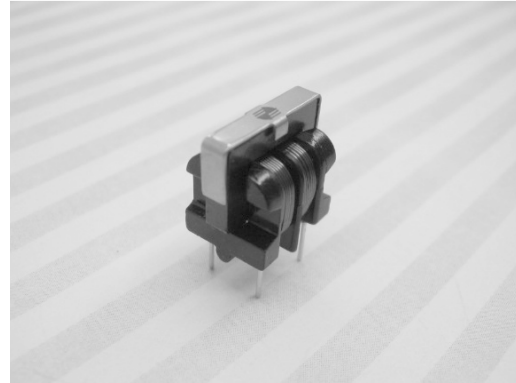
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• Tel: (852) 2954 3027 • Fax: (852) 2954 3304



-  Rated voltage: 250V, DC to 400Hz
-  2000VAC isolation between windings
-  750VAC isolation between windings and core
-  Temperature rise: 50°C maximum
-  Operating temperature -55°C to +125°C
-  Core can be assembled horizontally by special request
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

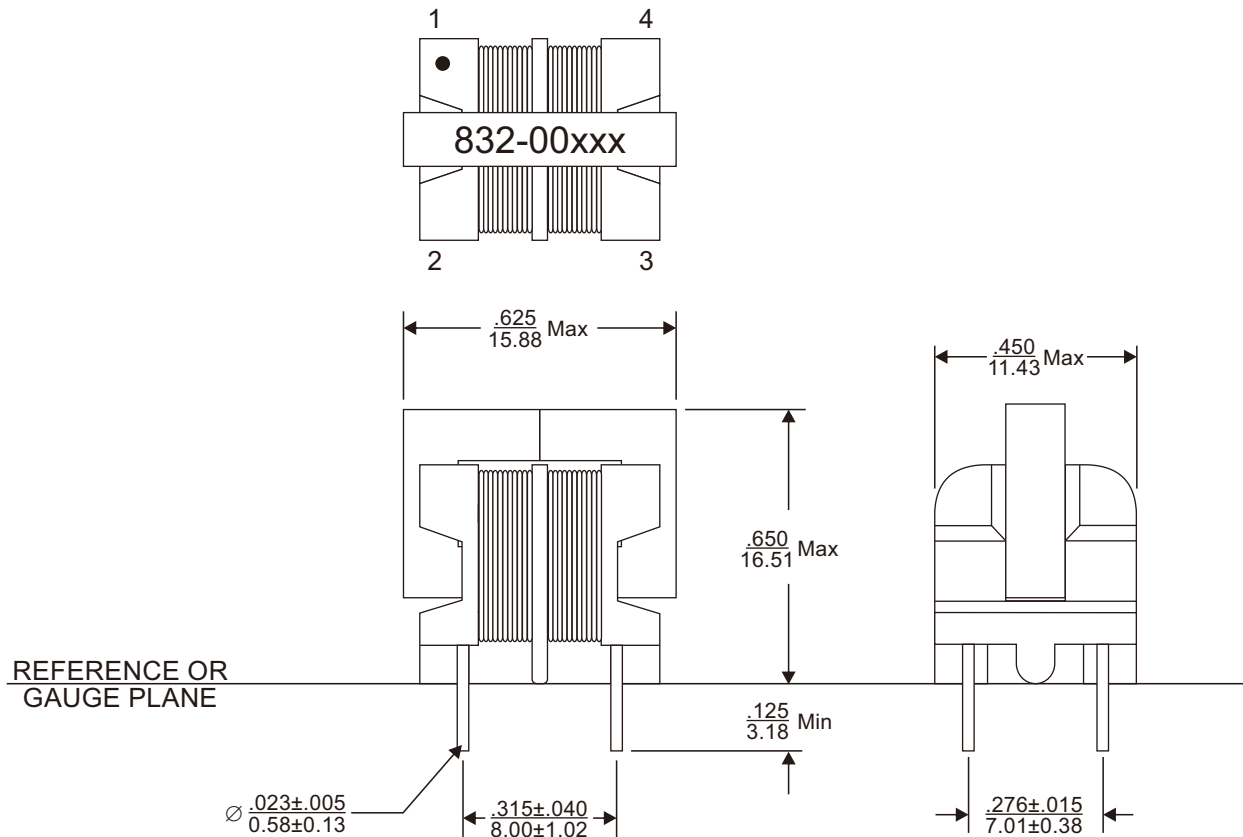
Part Number	Inductance <sup>1</sup> Minimum (mH)	Rated Current I <sub>rms</sub> (A Max)	DCR ( $\Omega$ Max)	Marking (xxx)
832-00083F	0.39	1.60	0.08	083
832-00084F	0.68	1.20	0.13	084
832-00085F	0.90	1.00	0.19	085
832-00086F	1.40	0.80	0.30	086
832-00087F	2.10	0.65	0.48	087
832-00088F	3.30	0.50	0.74	088
832-00089F	4.90	0.40	1.20	089
832-00090F	7.40	0.35	1.80	090
832-00091F	11.50	0.27	2.80	091
832-00092F	18.70	0.22	4.45	092

**Notes:**

1. Inductance is measured at 1kHz.
2. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



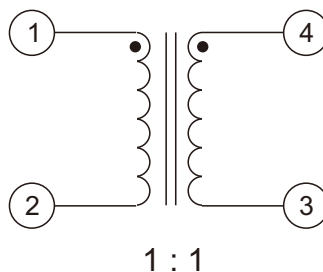
**MECHANICAL DIMENSIONS**



**Notes:**

3. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
4. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

**SCHEMATICS**



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-  Rated voltage: 250V, DC to 400Hz
-  2000VAC isolation between windings
-  750VAC isolation between windings and core
-  Temperature rise: 50°C maximum
-  Operating temperature -55°C to +125°C
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

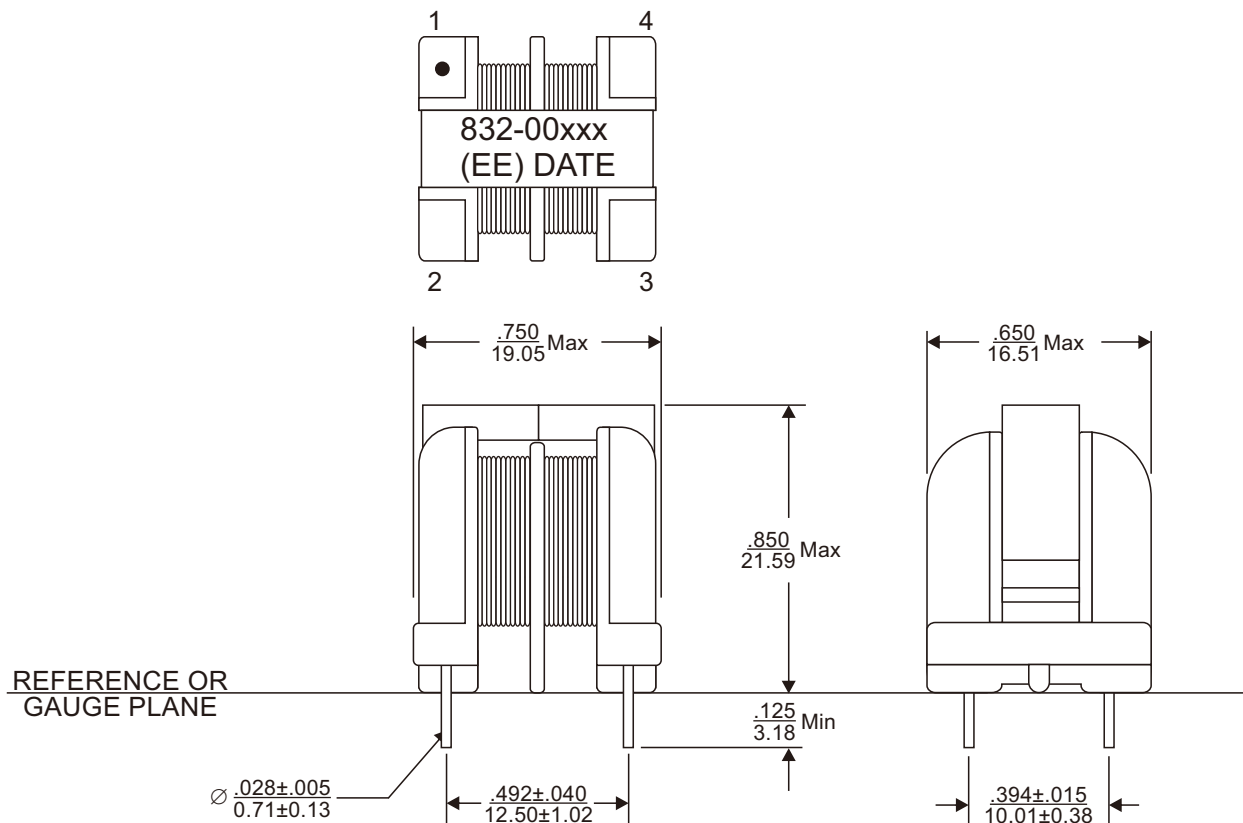
Part Number	Inductance <sup>1</sup> Minimum (mH)	Rated Current I <sub>rms</sub> (A Max)	DCR (Ω Max)	Marking (xxx)
832-00093F	0.9	2.60	0.08	093
832-00094F	1.8	2.00	0.13	094
832-00095F	2.5	1.60	0.19	095
832-00096F	4.0	1.30	0.30	096
832-00097F	6.2	1.00	0.46	097
832-00098F	10.8	0.80	0.76	098
832-00099F	16.3	0.65	1.17	099
832-00100F	26.0	0.50	1.80	100
832-00101F	38.3	0.42	2.73	101
832-00102F	57.6	0.34	4.44	102
832-00103F	90.0	0.27	6.72	103
832-00104F	147.0	0.21	10.80	104

**Notes:**

1. Inductance is measured at 1kHz.
2. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



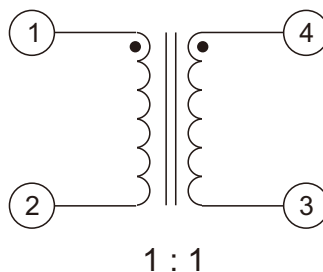
**MECHANICAL DIMENSIONS**



**Notes:**

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-  Rated voltage: 250V, DC to 400Hz
-  2000VAC isolation between windings
-  750VAC isolation between windings and core
-  Temperature rise: 50°C maximum
-  Operating temperature -55°C to +125°C
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

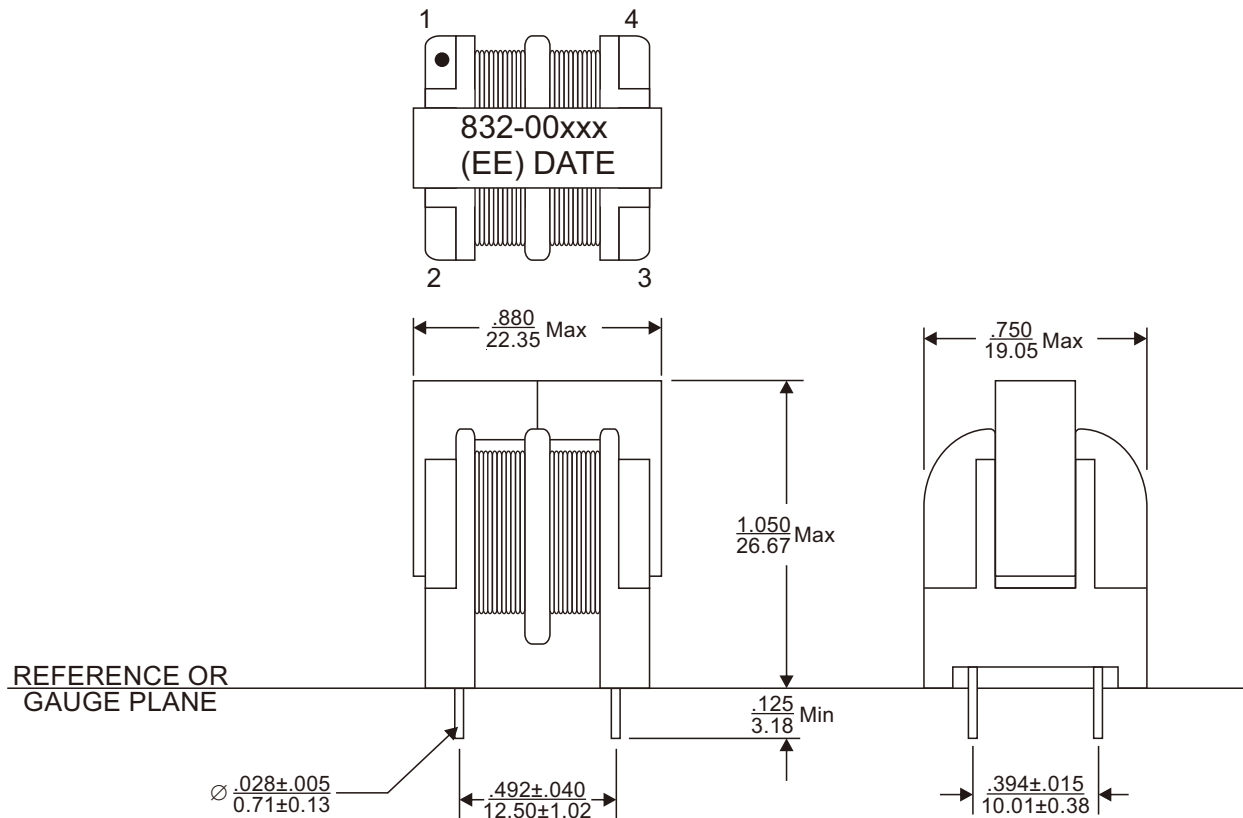
Part Number	Inductance <sup>1</sup> Minimum (mH)	Rated Current I <sub>rms</sub> (A Max)	DCR (Ω Max)	Marking (xxx)
832-00105F	0.69	4.00	0.05	105
832-00106F	1.10	3.20	0.07	106
832-00107F	1.60	2.55	0.11	107
832-00108F	2.50	2.00	0.16	108
832-00109F	4.10	1.60	0.26	109
832-00110F	6.45	1.30	0.40	110
832-00111F	9.80	1.00	0.62	111
832-00112F	14.80	0.80	0.95	112
832-00113F	22.70	0.65	1.48	113
832-00114F	35.40	0.52	2.22	114
832-00115F	52.70	0.42	3.50	115
832-00116F	79.00	0.34	5.20	116
832-00117F	122.00	0.27	8.30	117
832-00118F	200.00	0.21	13.80	118

**Notes:**

- Inductance is measured at 1kHz.
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



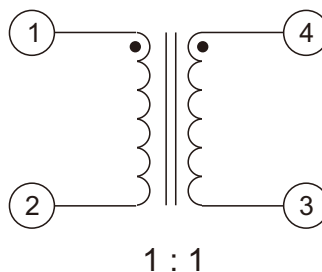
**MECHANICAL DIMENSIONS**



**Notes:**

3. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
4. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

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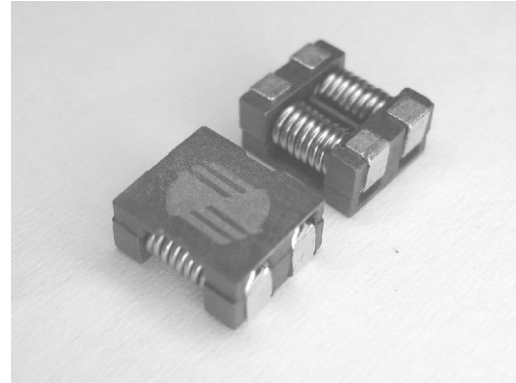
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-  Common mode impedance surpasses 300Ω and 700Ω at 100MHz.
-  Applicable for the miniaturization required to reduce the size and weight of portable equipment.
-  Rated voltage up to: 57V.
-  Operating temperature: -25°C to +85°C.
-  RoHS compliant.



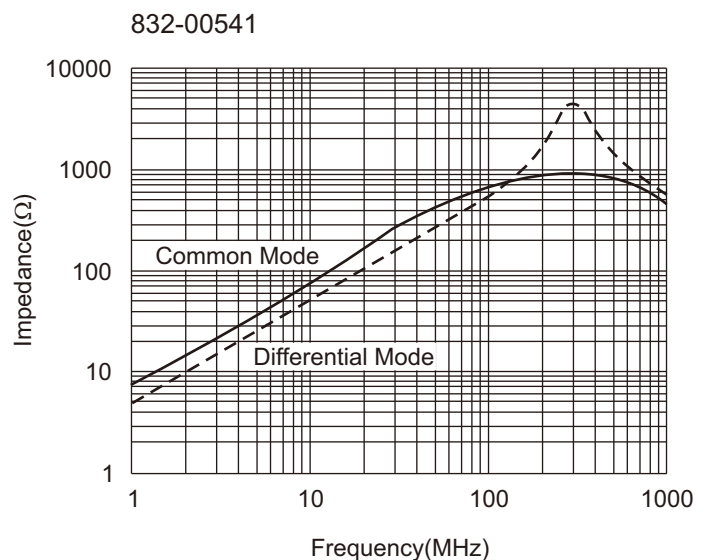
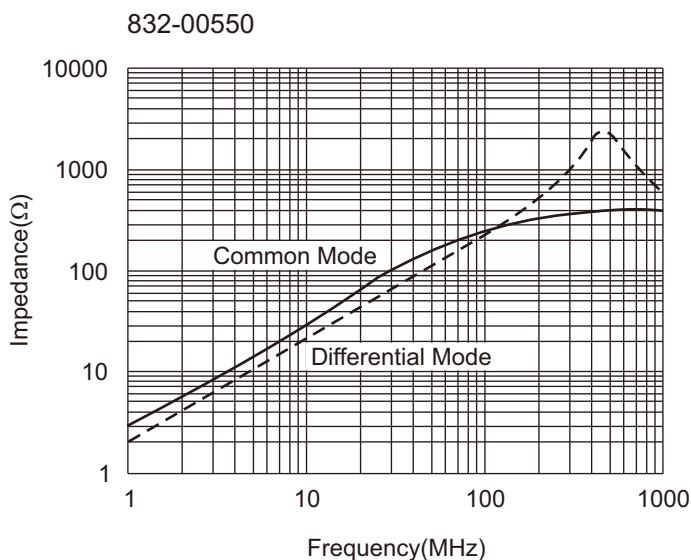
ELECTRICAL SPECIFICATION @ 25°C

Part Number	Impedance <sup>1</sup> at 100MHz (Ω Min)	Impedance at 100MHz (Ω Typ)	DCR (mΩ Max)	Rated Current Idc (A Max)	Insulation Resistance (MΩ Min)	Rated Voltage Edc (V Max)	Marking (32-xxx)
832-00550F	225	300	10	5	10	50	32-550
832-00541F	500	700	15	4	10	57	32-541

**Notes:**

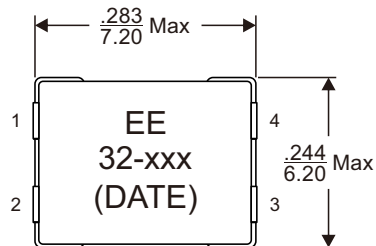
- Inductance is measured at 100MHz.
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

TYPICAL IMPEDANCE CURVES

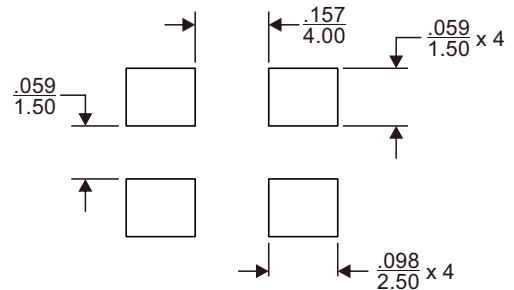
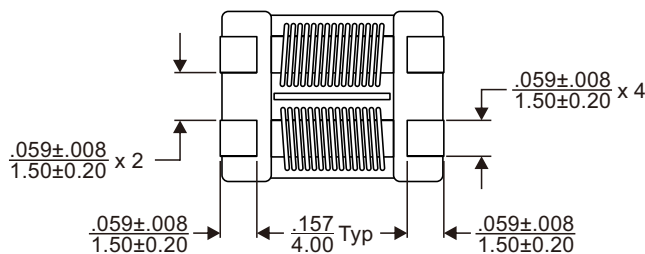




MECHANICAL DIMENSIONS



Gauge Plan or  
Reference Plane



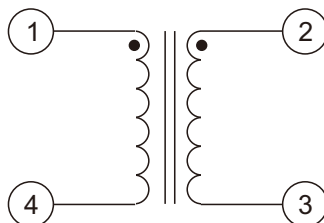
Recommended  
Pad Layout

Notes:

3. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in mm.
4. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

Weight (in gram)	: 3.15 typ.
Tape & Reel	: 2000 / reel

SCHEMATICS



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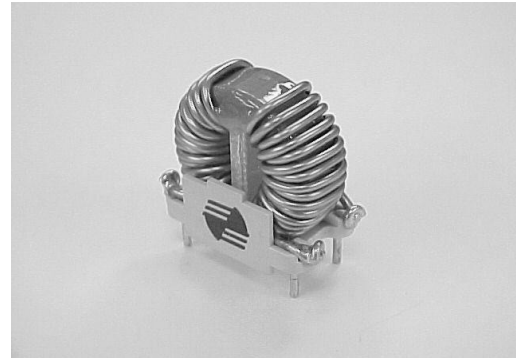
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-  Effective in filtering supply lines having in-phase signals of equal amplitude
-  Substantial attenuation can be achieved when the part is used in conjunction with input and output capacitors
-  Broad frequency range can be filtered by placing high and low inductance common mode toroids in series
-  1250 Vrms isolation between windings
-  Operating temperature -40°C to +85°C
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Inductance <sup>1</sup> (mH Min)	Rated Current I <sub>rms</sub> (A Max)	Leakage Inductance (μH Max)	DCR (Ω Max)	Package Number
832-00038F	5.0	1	80	.210	1
832-00037F	8.0	1	125	.270	1
832-00036F	15.0	1	233	.430	2
832-00035F	2.5	2	37	.090	1
832-00034F	4.0	2	70	.100	1
832-00033F	7.5	2	74	.110	2
832-00032F	1.3	4	20	.034	3
832-00031F	2.1	4	36	.040	1
832-00030F	3.7	4	40	.040	2
832-00029F	1.0	6	19	.022	1
832-00028F	1.7	6	34	.032	2
832-00027F	3.0	6	50	.027	3
832-00026F	0.6	9	11	.012	4
832-00272F	1.1	9	12	.013	5
832-00271F	1.9	9	20	.017	6
832-00025F	0.5	12	9	.008	7
832-00024F	0.8	12	9	.007	7
832-00023F	1.4	12	16	.011	8
832-00022F	0.3	15	6	.005	9
832-00021F	0.6	15	7	.006	10
832-00020F	1.1	15	14	.008	10

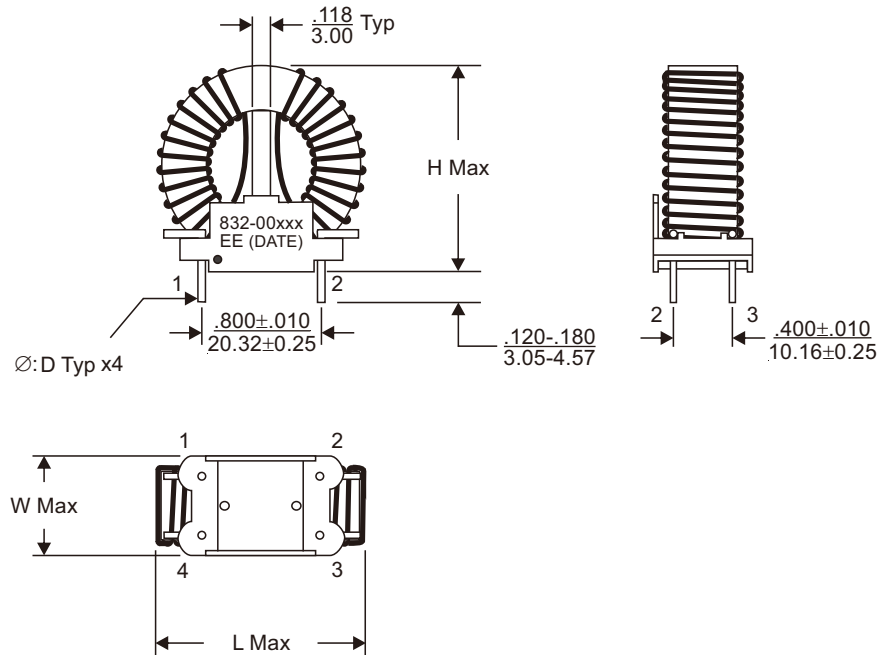
**Notes:**

- Inductance is tested at 15.75kHz, 0Adc.
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



### MECHANICAL DIMENSIONS

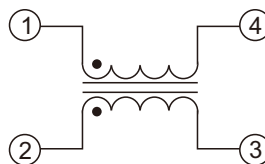
Package Number	H	L	W	D
1	$\frac{1.100}{27.94}$	$\frac{1.210}{30.73}$	$\frac{.625}{15.88}$	$\frac{.054}{1.37}$
2	$\frac{1.200}{30.48}$	$\frac{1.300}{33.02}$	$\frac{.625}{15.88}$	$\frac{.054}{1.37}$
3	$\frac{1.550}{39.37}$	$\frac{1.350}{34.29}$	$\frac{.700}{17.78}$	$\frac{.051}{1.30}$
4	$\frac{1.200}{30.48}$	$\frac{1.210}{30.73}$	$\frac{.625}{15.88}$	$\frac{.042}{1.07}$
5	$\frac{1.300}{33.02}$	$\frac{1.210}{30.73}$	$\frac{.625}{15.88}$	$\frac{.042}{1.07}$
6	$\frac{1.300}{33.02}$	$\frac{1.400}{35.56}$	$\frac{.650}{16.51}$	$\frac{.042}{1.07}$
7	$\frac{1.200}{30.48}$	$\frac{1.210}{30.73}$	$\frac{.650}{16.51}$	$\frac{.051}{1.30}$
8	$\frac{1.300}{33.02}$	$\frac{1.210}{30.73}$	$\frac{.650}{16.51}$	$\frac{.048}{1.22}$
9	$\frac{1.300}{33.02}$	$\frac{1.210}{30.73}$	$\frac{.625}{15.88}$	$\frac{.054}{1.37}$
10	$\frac{1.250}{31.75}$	$\frac{1.210}{30.73}$	$\frac{.650}{16.51}$	$\frac{.054}{1.37}$



### Notes:

3. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in inches.
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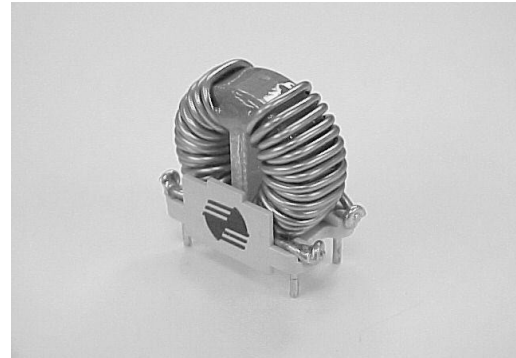
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-  Effective in filtering supply lines having in-phase signals of equal amplitude
-  Substantial attenuation can be achieved when the part is used in conjunction with input and output capacitors
-  Broad frequency range can be filtered by placing high and low inductance common mode toroids in series
-  1250 Vrms isolation between windings
-  Operating temperature -40°C to +85°C
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

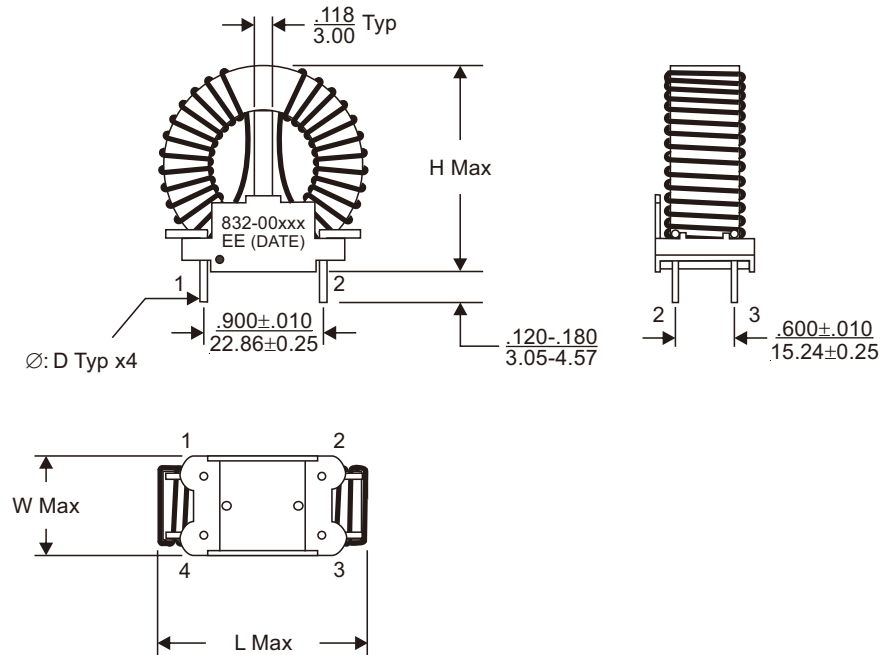
Part Number	Inductance <sup>1</sup> (mH Min)	Rated Current I <sub>rms</sub> (A Max)	Leakage Inductance (μH Max)	DCR (Ω Max)	Package Number
832-00052F	7.5	1	90	.270	1
832-00051F	13.0	1	190	.415	2
832-00050F	3.8	2	48	.106	1
832-00049F	6.5	2	98	.145	2
832-00048F	1.9	4	26	.038	1
832-00047F	3.3	4	45	.055	2
832-00046F	1.5	6	21	.029	1
832-00045F	2.6	6	41	.040	3
832-00044F	0.9	9	17	.014	4
832-00043F	1.5	9	15	.013	5
832-00042F	0.7	12	14	.011	6
832-00041F	1.2	12	14	.011	6
832-00040F	0.5	15	9	.007	7
832-00039F	0.8	15	10	.007	8

**Notes:**

- Inductance is tested at 15.75kHz, 0Adc.
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

## MECHANICAL DIMENSIONS

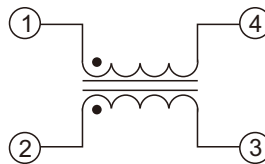
Package Number	H	L	W	D
1	<u>1.100</u> 27.94	<u>1.310</u> 33.27	<u>.825</u> 20.96	<u>.054</u> 1.37
2	<u>1.300</u> 33.02	<u>1.310</u> 33.27	<u>.825</u> 20.96	<u>.054</u> 1.37
3	<u>1.400</u> 35.56	<u>1.400</u> 35.56	<u>.900</u> 22.86	<u>.054</u> 1.37
4	<u>1.200</u> 30.48	<u>1.310</u> 33.27	<u>.825</u> 20.96	<u>.042</u> 1.07
5	<u>1.250</u> 31.75	<u>1.450</u> 36.83	<u>.825</u> 20.96	<u>.051</u> 1.30
6	<u>1.200</u> 30.48	<u>1.250</u> 31.75	<u>.825</u> 20.96	<u>.048</u> 1.22
7	<u>1.300</u> 33.02	<u>1.300</u> 33.02	<u>.825</u> 20.96	<u>.054</u> 1.37
8	<u>1.200</u> 30.48	<u>1.250</u> 31.75	<u>.825</u> 20.96	<u>.054</u> 1.37



Notes:

3. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in inches.
4. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

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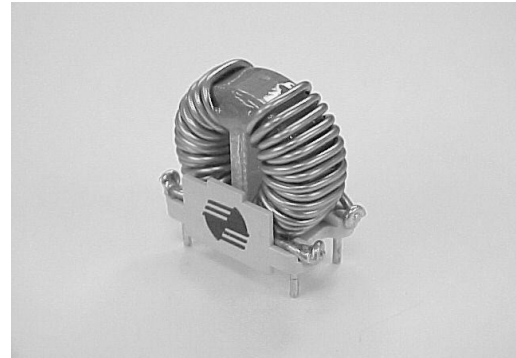
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-  Effective in filtering supply lines having in-phase signals of equal amplitude
-  Substantial attenuation can be achieved when the part is used in conjunction with input and output capacitors
-  Broad frequency range can be filtered by placing high and low inductance common mode toroids in series
-  1250 Vrms isolation between windings
-  Operating temperature -40°C to +85°C
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Inductance <sup>1</sup> (mH Min)	Rated Current I <sub>rms</sub> (A Max)	Leakage Inductance (μH Max)	DCR (Ω Max)	Package Number
832-00066F	32.0	1	485	.650	1
832-00065F	56.0	1	780	.900	2
832-00064F	16.0	2	210	.240	1
832-00063F	28.0	2	410	.330	2
832-00062F	8.0	4	58	.061	3
832-00061F	14.0	4	180	.120	4
832-00060F	6.6	6	49	.048	5
832-00059F	11.5	6	140	.088	4
832-00058F	4.0	9	37	.026	6
832-00057F	7.0	9	104	.045	7
832-00056F	3.0	12	40	.022	8
832-00055F	5.2	12	47	.025	9
832-00054F	2.5	15	42	.019	10
832-00053F	4.4	15	48	.017	11

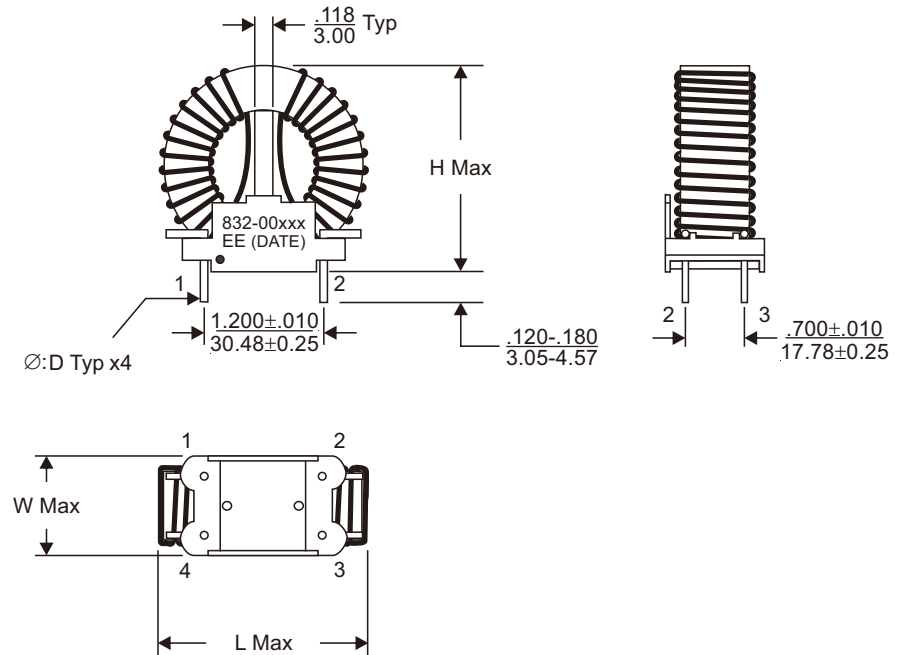
**Notes:**

1. Inductance is tested at 15.75kHz, 0Adc.
2. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



# MECHANICAL DIMENSIONS

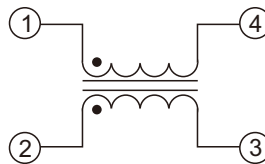
Package Number	H	L	W	D
1	1.400 35.56	1.650 41.91	.925 23.50	.054 1.37
2	1.650 41.91	1.650 41.91	.925 23.50	.054 1.37
3	1.350 34.29	1.650 41.91	.925 23.50	.054 1.37
4	1.700 43.18	1.650 41.91	.925 23.50	.054 1.37
5	1.400 35.56	1.600 40.64	.925 23.50	.054 1.37
6	1.400 35.56	1.450 36.83	.925 23.50	.042 1.07
7	1.800 45.72	1.760 44.70	.975 24.77	.042 1.07
8	1.700 43.18	1.700 43.18	.950 24.13	.048 1.22
9	1.700 43.18	1.700 43.18	1.000 25.40	.048 1.22
10	1.750 44.45	1.750 44.45	1.000 25.40	.054 1.37
11	1.700 43.18	1.700 43.18	1.000 25.40	.054 1.37



## Notes:

3. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in inches.
4. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

# SCHEMATICS



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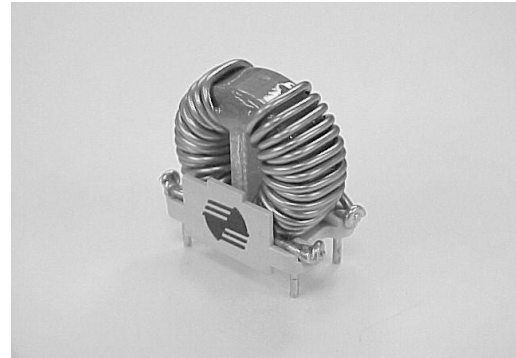
Email: eempl@eleceltek.com

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-  Effective in filtering supply lines having in-phase signals of equal amplitude
-  Substantial attenuation can be achieved when the part is used in conjunction with input and output capacitors
-  Broad frequency range can be filtered by placing high and low inductance common mode toroids in series
-  1250 Vrms isolation between windings
-  Operating temperature -40°C to +85°C
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Inductance <sup>1</sup> (mH Min)	Rated Current I <sub>rms</sub> (A Max)	Leakage Inductance (μH Max)	DCR (Ω Max)	Package Number
832-00080F	32.0	1	1400	1.150	1
832-00079F	125.0	1	1400	1.150	2
832-00078F	36.0	2	680	0.415	2
832-00077F	62.0	2	750	0.415	3
832-00076F	19.0	4	350	0.150	4
832-00075F	32.0	4	370	0.158	4
832-00074F	15.0	6	275	0.114	4
832-00073F	26.0	6	320	0.115	5
832-00072F	10.0	9	155	0.057	6
832-00071F	17.0	9	220	0.062	7
832-00070F	7.5	12	140	0.042	8
832-00069F	13.0	12	155	0.043	9
832-00068F	6.0	15	111	0.030	10
832-00067F	10.0	15	122	0.029	11

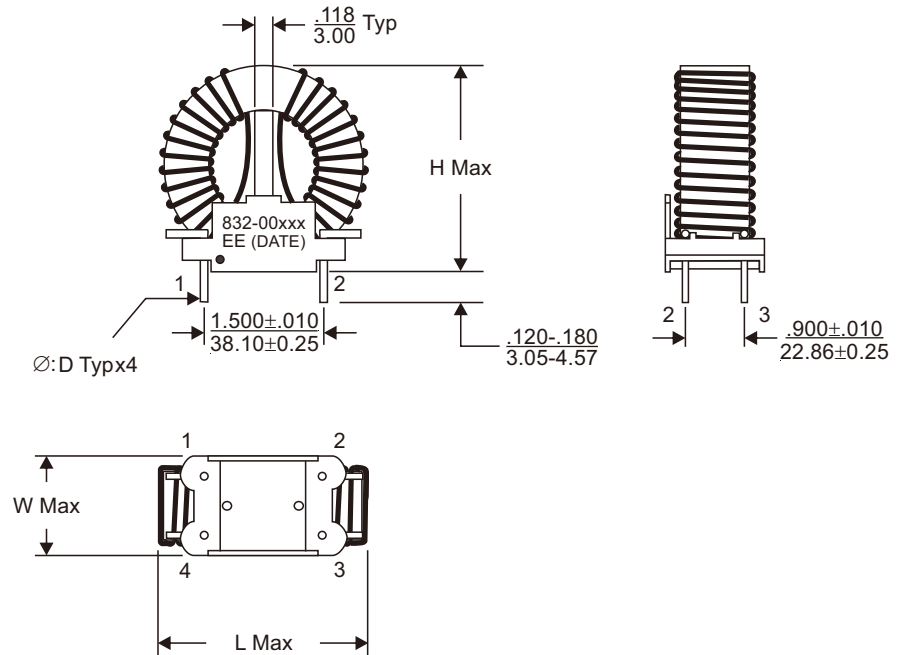
**Notes:**

1. Inductance is tested at 15.75kHz, 0Adc.
2. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



# MECHANICAL DIMENSIONS

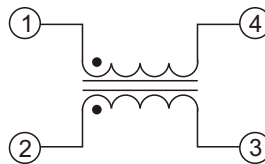
Package Number	H	L	W	D
1	2.100 53.34	2.100 53.34	1.130 28.70	.054 1.37
2	2.200 55.88	2.150 54.61	1.130 28.70	.054 1.37
3	2.200 55.88	2.200 55.88	1.130 28.70	.054 1.37
4	2.200 55.88	2.180 55.37	1.130 28.70	.054 1.37
5	2.300 58.42	2.180 55.37	1.130 28.70	.054 1.37
6	2.200 55.88	2.180 55.37	1.130 28.70	.042 1.07
7	2.280 57.91	2.250 57.15	1.130 28.70	.042 1.07
8	2.200 55.88	2.250 57.15	1.130 28.70	.048 1.22
9	2.300 58.42	2.300 58.42	1.130 28.70	.048 1.22
10	2.200 55.88	2.250 57.15	1.150 29.21	.054 1.37
11	2.300 58.42	2.300 58.42	1.130 28.70	.054 1.37



## Notes:

3. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in inches.
4. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

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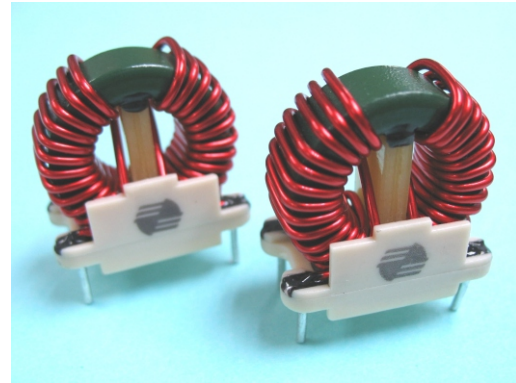
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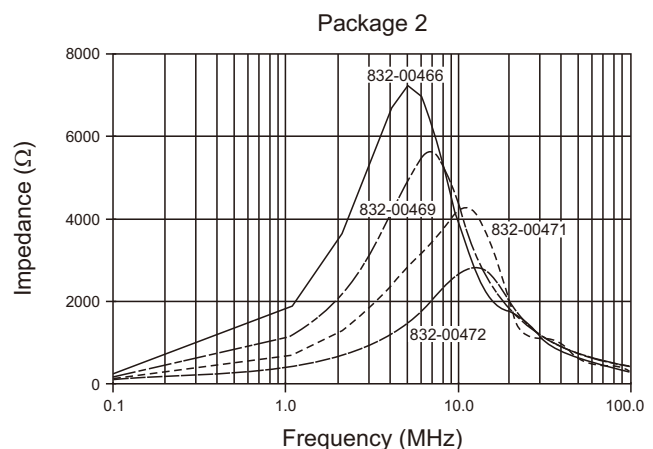
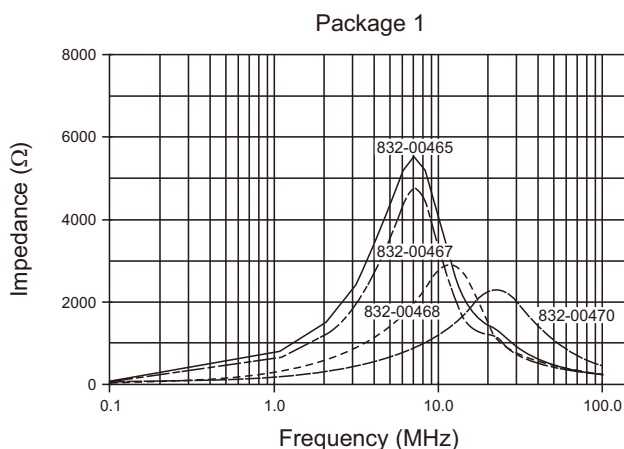
-  Current rating: up to 23.4Adc
-  Dielectric strength: 3000Vrms with 3.0mm creepage
-  Package Height: 38.8mm for Package 1 and 43.2mm for Package 2
-  Footprint: 35.6 x 15.6mm for Package 1 and 45.7 x 21.6mm for Package 2
-  Operating temperature -40°C to +125°C
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Rated RMS Current <sup>2</sup> (A)	Nominal Inductance <sup>1</sup> (Reference Only) (uH)	Impedance (Ω Min)						DCR (Each Wdg.) (Ω Max)	SRF (MHz Min)	Package Number
			1MHz	5MHz	10MHz	30MHz	50MHz	100MHz			
832-00465F	5.5	144.5	470	3100	1750	475	275	100	30	4.15	1
832-00466F	8.1	240	950	3150	1250	380	220	90	25	2.75	2
832-00467F	8.3	115	370	1100	410	265	210	115	13	3.00	1
832-00468F	12.2	46	200	950	750	340	210	95	6.0	4.80	1
832-00469F	12.2	150	700	2800	1350	400	220	80	11	3.80	2
832-00470F	17.2	32.4	100	500	690	350	230	90	3.0	7.80	1
832-00471F	17.2	95	380	2300	1300	360	200	85	5.5	4.60	2
832-00472F	23.4	57.1	200	1200	1800	420	235	100	3.0	6.00	2

**TYPICAL IMPEDANCE CURVES**

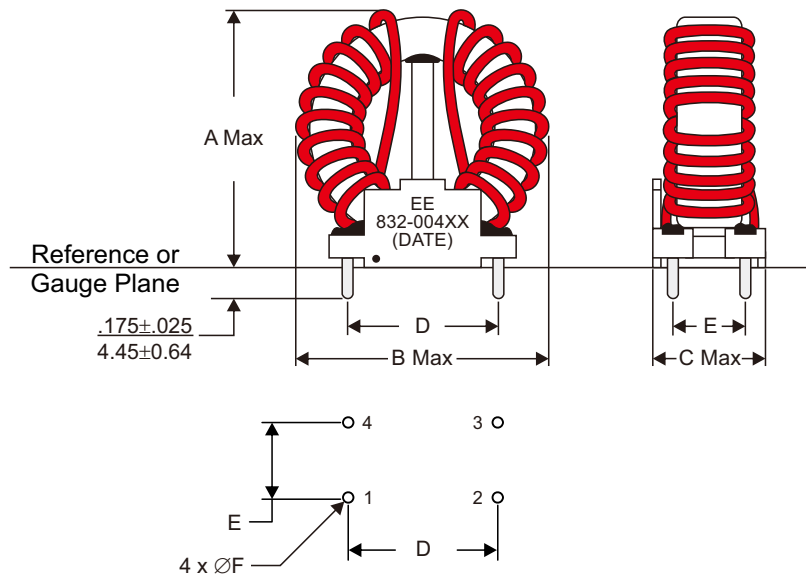


**Notes:**

- Inductance is measured at 20kHz, 0.02Vrms.
- Rated current, I<sub>rated</sub>, is the current required to raise the component temperature by approximately 40°C.
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



**MECHANICAL DIMENSIONS**



Recommended Hole Diameter F (inches/mm)	
832-00470	.085 / 2.16
832-00468	.070 / 1.78
832-00467	.060 / 1.52
832-00465	.060 / 1.52
832-00472	.105 / 2.67
832-00471	.085 / 2.16
832-00469	.070 / 1.78
832-00466	.060 / 1.52

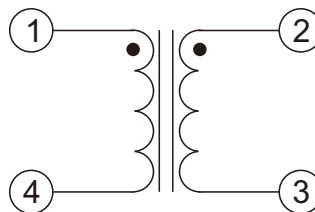
Recommended PAD Layout

Package Number	A	B	C	D	E	F
1	$\frac{1.450}{36.83}$	$\frac{1.400}{35.56}$	$\frac{.615}{15.62}$	$\frac{.800}{20.32}$	$\frac{.400}{10.16}$	(See Chart above)
2	$\frac{1.700}{43.18}$	$\frac{1.800}{45.72}$	$\frac{.850}{21.59}$	$\frac{.900}{22.86}$	$\frac{.600}{15.24}$	(See Chart above)

**Notes:**

- All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in inches.
- Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

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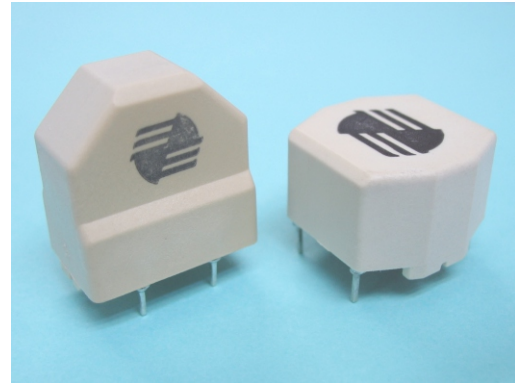
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-  Rated voltage: 250Vac
-  Withstanding voltage: 1500Vac
-  Materials meet UL-94V0 requirements
-  Operating temperature 0°C to +60°C
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

Part Number (Vertical)	Part Number (Horizontal)	Inductance <sup>1</sup> (mH±30%)	Current (A)	DCR (Ω±20%)	Resonance Frequency (kHz) Typ	Package Number
832-00473F	832-00494F	3.3	1.50	0.17	800	3
832-00474F	832-00495F	3.3	2.50	0.07	700	4
832-00475F	--	3.3	2.80	0.06	700	5
832-00476F	--	3.3	4.00	0.06	700	6
--	832-00496F	3.3	8.00	0.028	700	8
832-00477F	832-00497F	6.8	1.20	0.30	400	3
832-00478F	832-00498F	6.8	2.00	0.14	450	5
832-00479F	--	6.8	2.20	0.17	450	6
832-00480F	832-00499F	10	0.70	0.55	350	3
832-00481F	832-00500F	10	1.20	0.30	350	4
832-00482F	--	10	1.60	0.21	300	5
832-00483F	--	10	1.80	0.20	300	6
832-00484F	832-00501F	15	0.50	0.77	300	3
832-00485F	--	15	1.00	0.40	220	4
832-00486F	--	18	1.40	0.28	200	6
832-00487F	832-00502F	27	0.40	1.70	180	3
832-00488F	832-00503F	27	0.70	0.62	180	4
832-00489F	832-00504F	39	0.35	2.00	160	3
832-00490F	832-00505F	39	0.50	1.12	160	4
832-00491F	--	39	0.70	1.00	160	5
832-00492F	--	47	0.30	2.30	150	3
832-00493F	--	47	0.40	1.30	150	4

**Notes:**

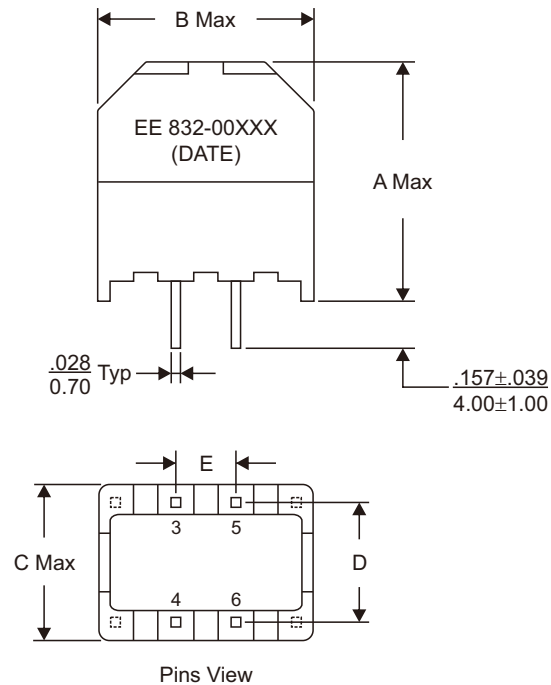
- Inductance is measured at 10kHz, 0.10Vrms.
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



**MECHANICAL DIMENSIONS**

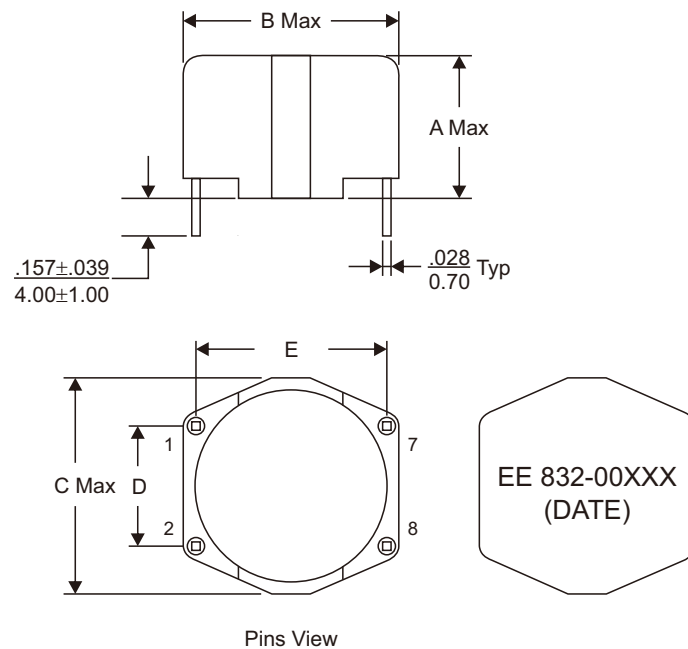
**Vertical Package**

Package Number	A	B	C	D	E
3	<u>.803</u> 20.40	<u>.724</u> 18.40	<u>.528</u> 13.40	<u>.394</u> 10.00	<u>.197</u> 5.00
4	<u>1.000</u> 25.40	<u>.921</u> 23.40	<u>.626</u> 15.90	<u>.492</u> 12.50	<u>.394</u> 10.00
5	<u>1.197</u> 30.40	<u>1.079</u> 27.40	<u>.724</u> 18.40	<u>.591</u> 15.00	<u>.492</u> 12.50
6	<u>1.394</u> 35.40	<u>1.276</u> 32.40	<u>.724</u> 18.40	<u>.591</u> 15.00	<u>.492</u> 12.50



**Horizontal Package**

Package Number	A	B	C	D	E
3	<u>.508</u> 12.90	<u>.705</u> 17.90	<u>.705</u> 17.90	<u>.394</u> 10.00	<u>.591</u> 15.00
4	<u>.606</u> 15.40	<u>.902</u> 22.90	<u>.902</u> 22.90	<u>.492</u> 12.50	<u>.787</u> 20.00
5	<u>.705</u> 17.90	<u>1.098</u> 27.90	<u>1.098</u> 27.90	<u>.591</u> 15.00	<u>.984</u> 25.00
8	<u>1.000</u> 25.40	<u>1.709</u> 43.40	<u>1.669</u> 42.40	<u>.591</u> 15.00	<u>1.575</u> 40.00



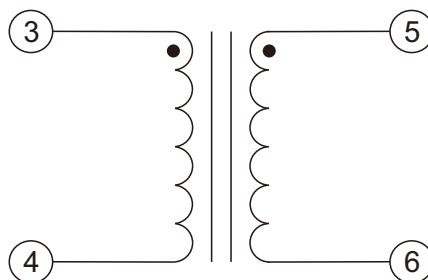
**Notes:**

3. All dimensions are specified in inches with higher precedence in mm.
4. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{.25}$ .

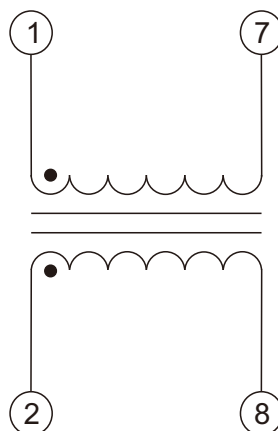


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Vertical Package



Horizontal Package



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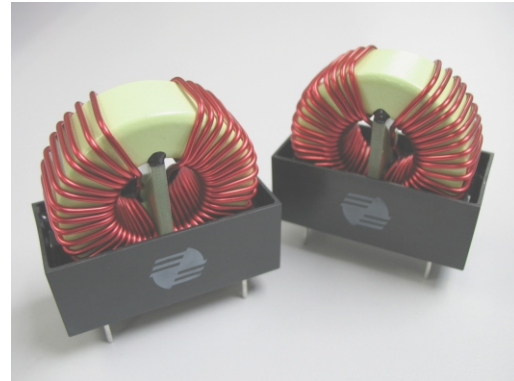
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-  Vertical mounting design available
-  Inductance range: 2.0mH to 16.0mH
-  Windings balance within one percent
-  Can be used in switching power supply input filter circuits
-  Dielectric strength 1250Vrms
-  Designed with 3.0mm minimum creep distance between windings
-  Operating temperature -40°C to +130°C
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

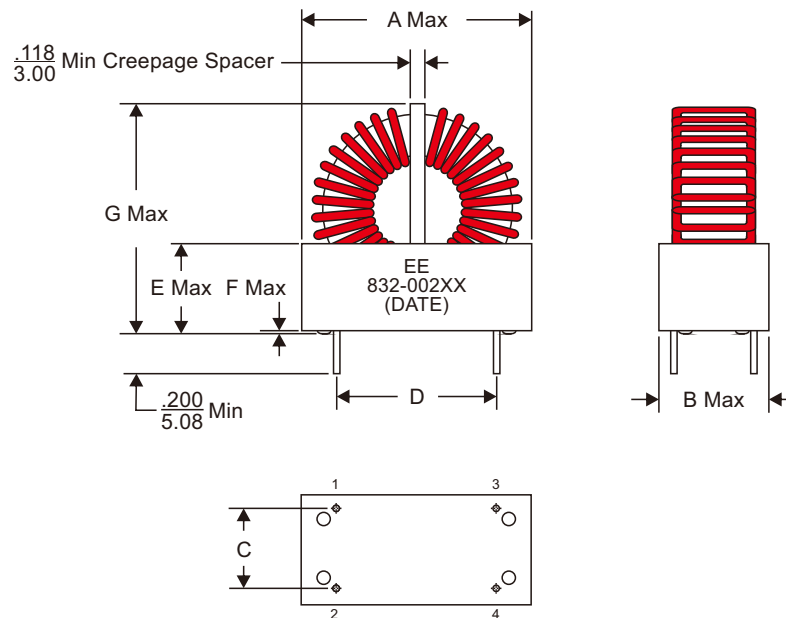
Part Number	Rated <sup>2</sup> Current (A)	Load VA at RMS line		Inductance <sup>1</sup> at 1kHz (mH Min)	Test Level Volts RMS 1.0 kHz	Leakage Inductance 130 kHz (uH Max)	DCR Each WDG (Ω Max)	Package Number	Lead Dia. Inches ±.003
		117 V	220 V						
832-00246F	1.8	210	420	10.0	0.50	130	0.240	1	0.032
832-00247F	3.5	400	800	3.0	0.20	35	0.060	1	0.032
832-00248F	6.0	700	1400	1.0	0.08	12	0.020	1	0.036
832-00249F	2.6	300	600	16.0	1.00	180	0.160	2	0.040
832-00250F	3.2	375	750	8.0	0.50	90	0.120	2	0.040
832-00251F	5.2	600	1200	4.0	0.20	45	0.040	2	0.036
832-00252F	7.5	875	1750	2.0	0.08	25	0.020	2	0.047

**Notes:**

1. Inductance is measured at 1kHz.
2. Rated current, I<sub>rated</sub>, is the current required to raise the component temperature by approximately 40°C.
3. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



### MECHANICAL DIMENSIONS

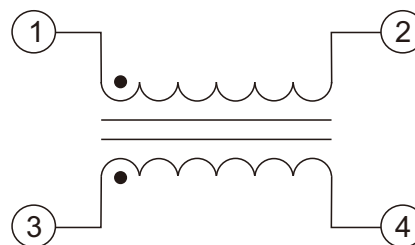


Package Number	A	B	C	D	E	F	G
1	$\frac{1.15}{29.21}$	$\frac{.550}{13.97}$	$\frac{.400}{10.16}$	$\frac{.800}{20.32}$	$\frac{.450}{11.43}$	$\frac{.015}{0.38}$	$\frac{1.15}{29.21}$
2	$\frac{1.44}{36.58}$	$\frac{.800}{20.32}$	$\frac{.600}{15.24}$	$\frac{.900}{22.86}$	$\frac{.700}{17.78}$	$\frac{.030}{0.76}$	$\frac{1.50}{38.10}$

#### Notes:

4. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in inches.
5. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

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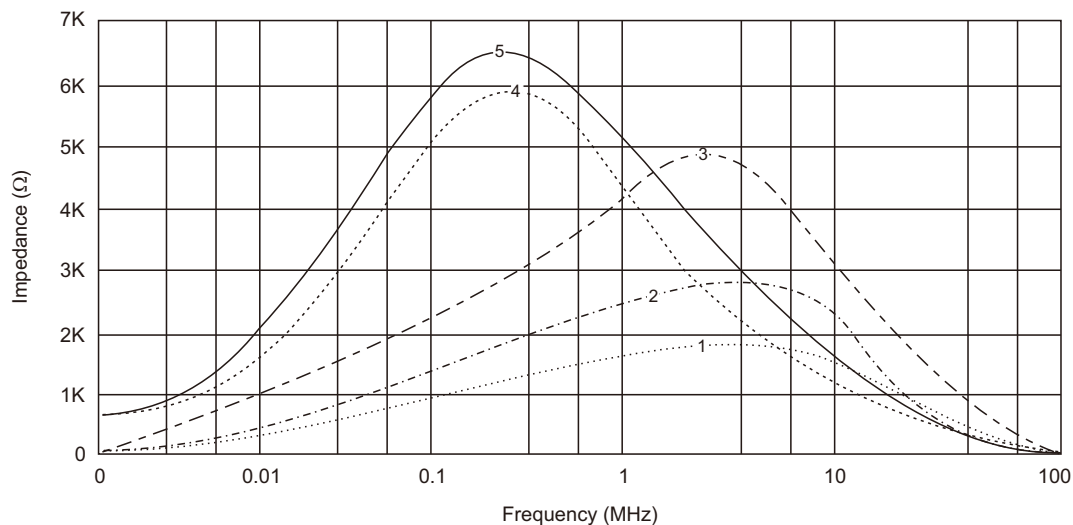
-  Inductance range: 1.0mH to 22.0mH
-  Current rating: up to 3.6A
-  Rated voltage 250V<sub>AC</sub>
-  Low RFI toroid
-  Operating temperature -40°C to +130°C
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Inductance <sup>1</sup> (mH±30%)	I <sub>rated</sub> (A)	DCR (mΩ) Max	SRF (MHz)	Impedance vs Frequency (See curve below)	Size Code	Weight (gm) Typ	Quantity Per Reel
832-00204F	22.0	0.50	850	0.3	5	1	2.4	300
832-00203F	10.0	1.00	450	0.5	4	1	2.4	300
832-00082F	3.0	2.50	80	2.2	3	2	5.2	200
832-00081F	1.0	1.50	60	2	2	1	2.5	300
832-00202F	1.0	3.60	50	4	1	2	5.3	200

**TYPICAL IMPEDANCE CURVES**

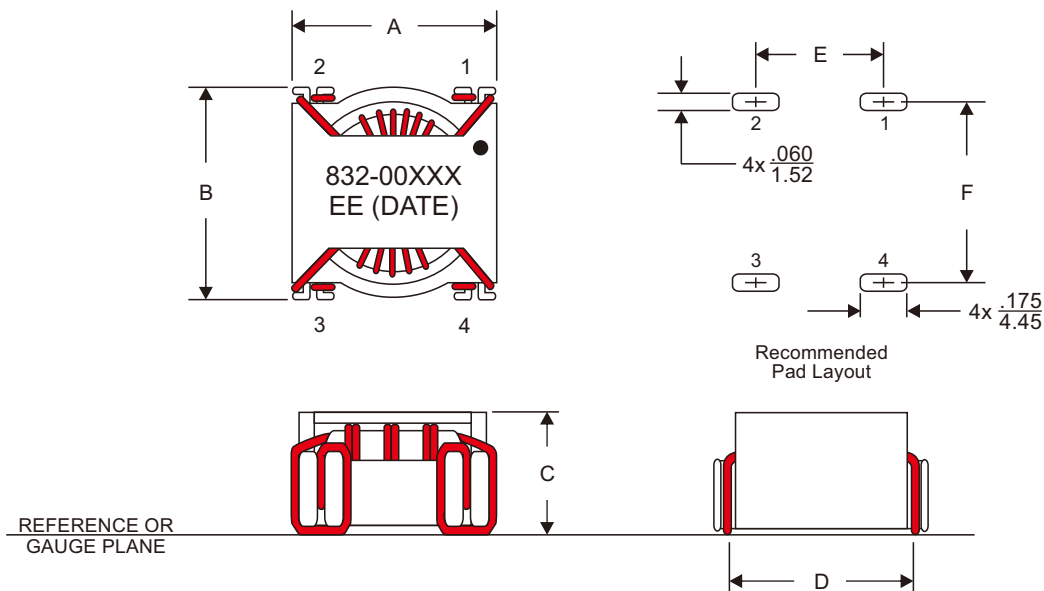


**Notes:**

- Inductance is measured at 100kHz, 1.14V<sub>rms</sub>.
- The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.



MECHANICAL DIMENSIONS

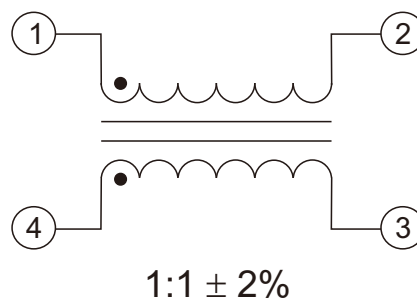


Size Code	A	B	C	D	E	F
1	$\frac{.560}{14.22}$	$\frac{.645}{16.38}$	$\frac{.350}{8.89}$	$\frac{.520}{13.21}$	$\frac{.340}{8.64}$	$\frac{.530}{13.46}$
2	$\frac{.670}{17.02}$	$\frac{.770}{19.56}$	$\frac{.390}{9.91}$	$\frac{.650}{16.51}$	$\frac{.445}{11.30}$	$\frac{.660}{16.76}$

Notes:

3. All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in inches.
4. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

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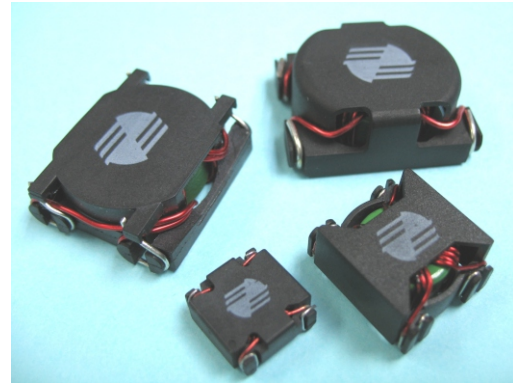
FLAT G, 5/F, Valiant Industrial Centre,  
2-12 Au Pui Wan Street, Fotan, Shatin, N.T.  
Hong Kong  
Tel: (852) 2954 3027 Fax: (852) 2954 3304  
Email: eempl@eleceltek.com

Website: <http://www.eleceltek.com> / [www.eemagnetic.com](http://www.eemagnetic.com)

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-  Inductance range: 0.47mH to 1.17mH
-  Current rating: up to 14A
-  Solutions based on impedance, size and current
-  Designed for DC/DC converters
-  Wide variety of inductor sizes and current ratings available
-  Dielectric strength: 1000Vrms
-  Operating temperature -40°C to +120°C
-  RoHS compliant



**ELECTRICAL SPECIFICATION @ 25°C**

Part Number	Inductance <sup>1</sup> (mH±35%)	I <sub>rated</sub> (A)	DCR (mΩ) Max	Impedance vs Frequency (See back page)	Package Size
832-00209F	0.47	14.0	8	9	D
832-00207F	0.63	11.6	10	7	D
832-00206F	0.81	9.70	14	6	D
832-00019F	0.59	7.20	15	8	C
832-00017F	0.59	5.60	20	7	B
832-00018F	0.77	4.70	40	6	B
832-00014F	0.22	3.30	60	5	B
832-00007F	1.32	3.30	60	4	B
832-00015F	1.47	2.80	80	3	B
832-00208F	0.88	1.63	110	2	A
832-00205F	1.17	1.22	200	1	A

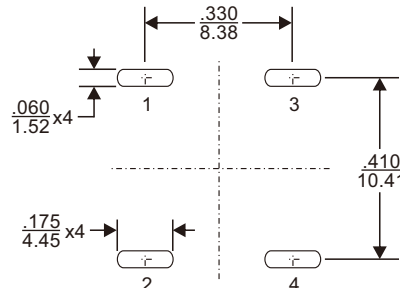
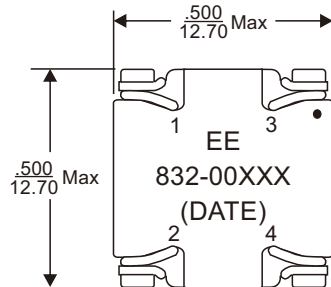
**Notes:**

1. Inductance is measured at 10kHz, 0.10Vrms.
2. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

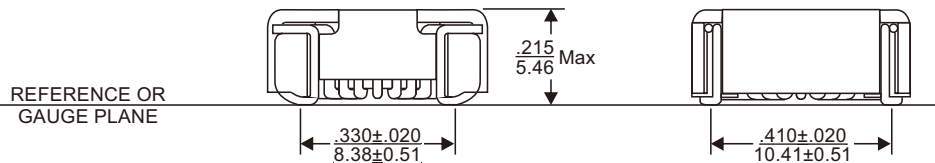


**MECHANICAL DIMENSIONS**

**Package A**

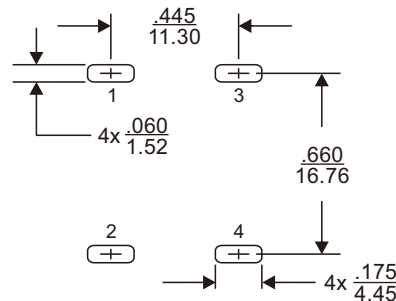
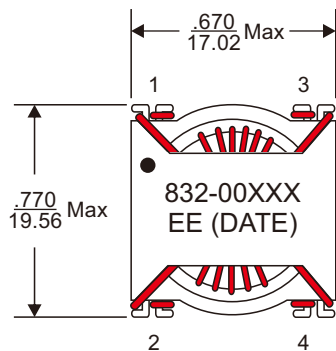


Recommended  
Pad Layout

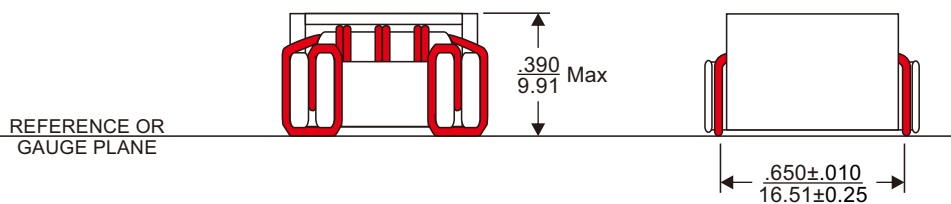


Weight (in gram)	: 1.5 typ.
Tape & Reel	: 600 / reel

**Package B**



Recommended  
Pad Layout



Weight (in gram)	: 4.7 typ.
Tape & Reel	: 200 / reel

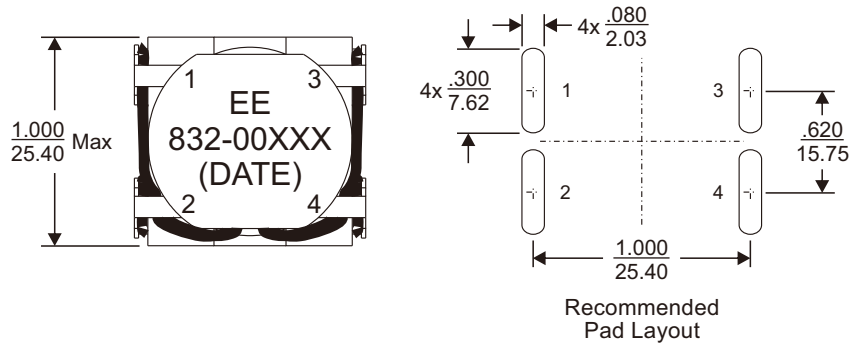
**Notes:**

3. All dimensions are specified in inches with higher precedence in inches.  
mm
4. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .



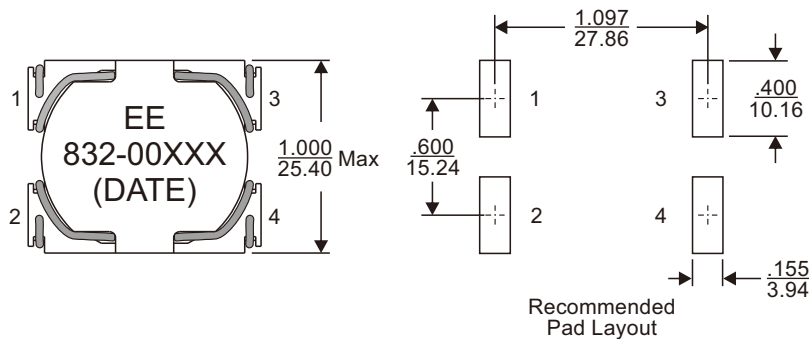
**MECHANICAL DIMENSIONS**

**Package C**



Weight (in gram)	: 7.7 typ.
Tape & Reel	: 100 / reel

**Package D**



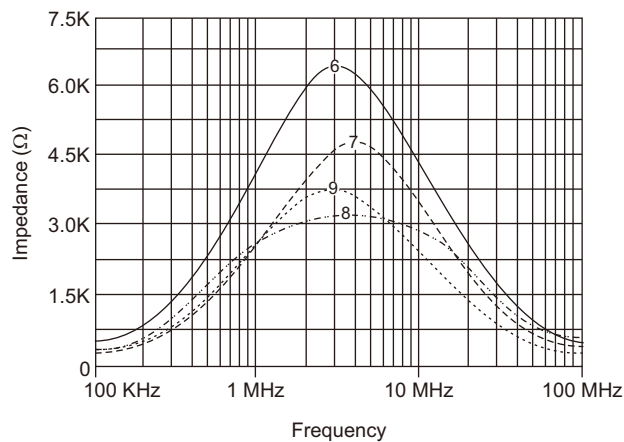
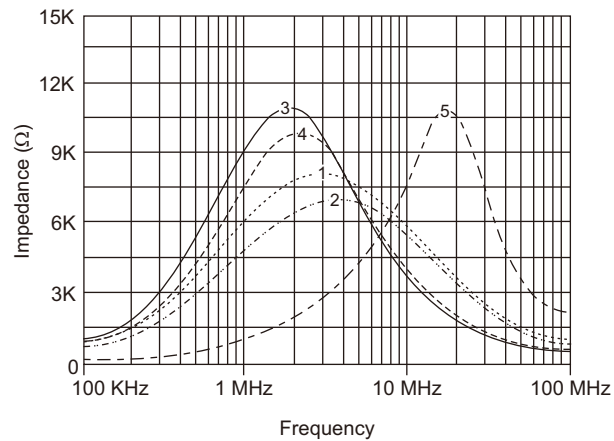
Weight (in gram)	: 7.7 typ.
Tape & Reel	: 100 / reel

**Notes:**

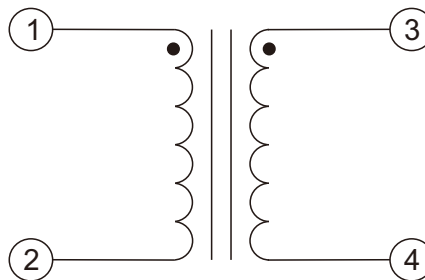
5. All dimensions are specified in inches with higher precedence in inches.
6. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{.25}$ .



TYPICAL IMPEDANCE CURVES



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