



THE DATASHEET OF SRR6040A-680M



Features

- Shielded construction
- Inductance range: 1.0 to 100 μ H
- Heating current up to 5 A
- Dimensions: 6.7 x 6.7 x 4 mm
- AEC-Q200 qualified
- RoHS compliant* and halogen free**

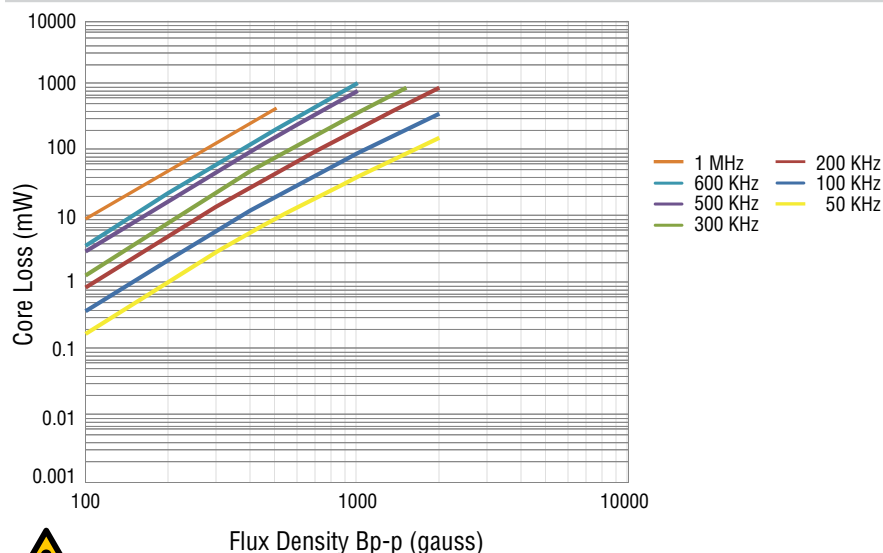
SRR6040A Series - Shielded Power Inductors

Electrical Specifications @ 25 °C

Bourns Part Number	Inductance @ 10 kHz / 1 V		DCR (Ω) Typ.	DCR (Ω) Max.	I rms (A)	I sat (A)	***K- Factor
	L (μ H)	Tol. (%)					
SRR6040A-1R0Y	1.0	± 30	0.0098	0.015	5.0	5.55	388
SRR6040A-3R0Y	3.0	± 30	0.0153	0.021	3.5	3.33	233
SRR6040A-5R0Y	5.0	± 30	0.0184	0.025	2.9	2.63	184
SRR6040A-6R8Y	6.8	± 30	0.0223	0.03	2.5	2.17	152
SRR6040A-8R2Y	8.2	± 30	0.0266	0.036	2.3	2.0	140
SRR6040A-100M	10	± 20	0.0358	0.05	2.0	1.72	120
SRR6040A-120M	12	± 20	0.0397	0.055	1.7	1.61	113
SRR6040A-150M	15	± 20	0.0428	0.06	1.6	1.51	106
SRR6040A-180M	18	± 20	0.0551	0.075	1.5	1.35	94
SRR6040A-220M	22	± 20	0.0647	0.087	1.3	1.22	85
SRR6040A-270M	27	± 20	0.0769	0.105	1.2	1.11	78
SRR6040A-330M	33	± 20	0.0903	0.12	1.1	1.02	71
SRR6040A-390M	39	± 20	0.103	0.135	1.0	0.94	66
SRR6040A-470M	47	± 20	0.123	0.16	0.95	0.85	59
SRR6040A-560M	56	± 20	0.149	0.19	0.86	0.77	54
SRR6040A-680M	68	± 20	0.187	0.24	0.75	0.7	49
SRR6040A-820M	82	± 20	0.22	0.29	0.7	0.63	44
SRR6040A-101M	100	± 20	0.266	0.345	0.65	0.57	40

***K-Factor: To calculate core flux density, Bp-p (gauss) = $K \times L(\mu H) \times \Delta I$ (peak-to-peak ripple current, A), determine core loss from *Core Loss vs. Flux Density* plot.

Core Loss vs. Flux Density



WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

**Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

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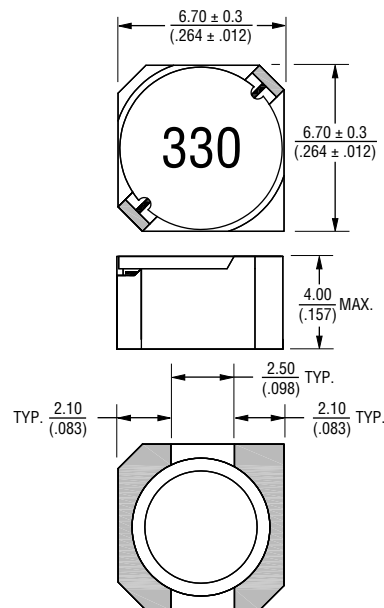
General Specifications

Operating Temperature -40 °C to +125 °C
(Temperature rise included)
Storage Temperature -40 °C to +125 °C
Resistance to Solder Heat +250°C for 10 sec.
Temperature Rise 30 °C typ. at rated I rms
Inductance drop 35 % at I sat

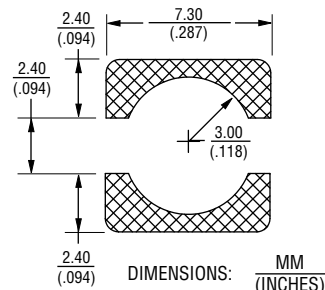
Materials

Core Ferrite
Wire Enameled copper
Terminal Finish Sn
Packaging 1000 pcs. per reel

Product Dimensions



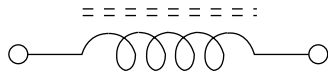
Recommended Layout



SRR6040A Series - Shielded Power Inductors

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Electrical Schematic

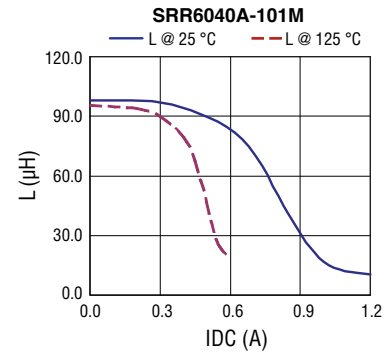
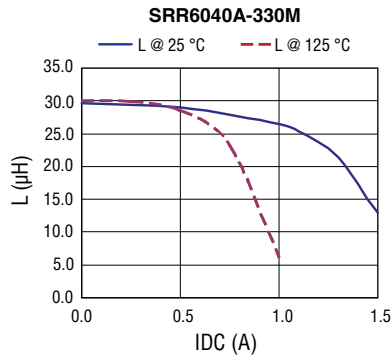
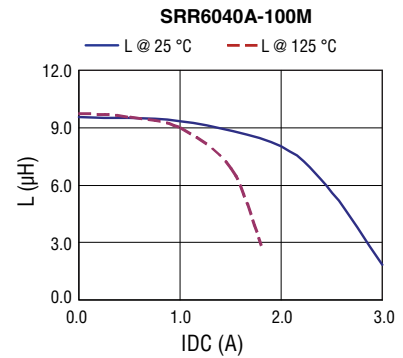
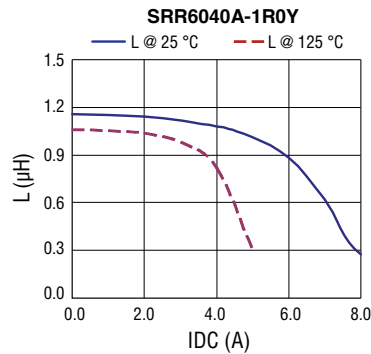


How to Order

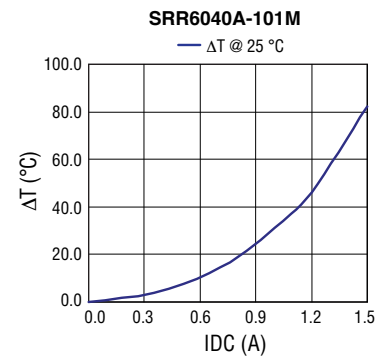
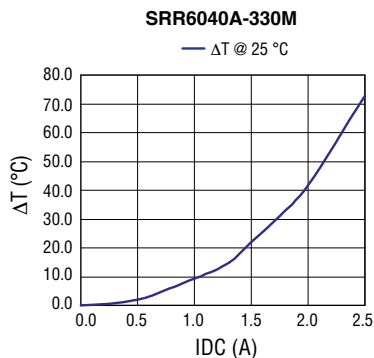
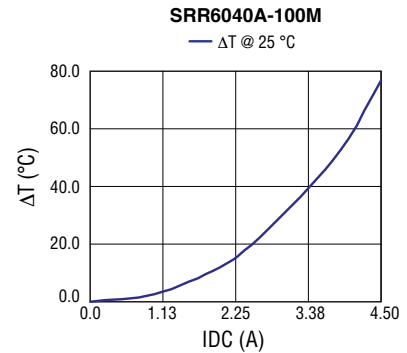
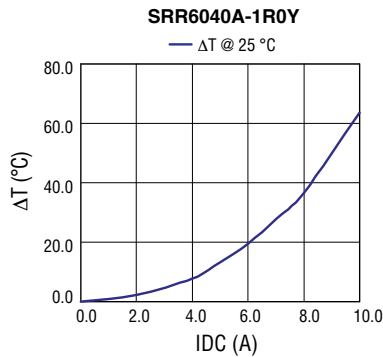
SRR6040A - 100M

Model _____
Value Code (see table) _____

Inductance vs. IDC



Temperature Rise vs. IDC



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Fax: +41-41 768 5510

The Americas:

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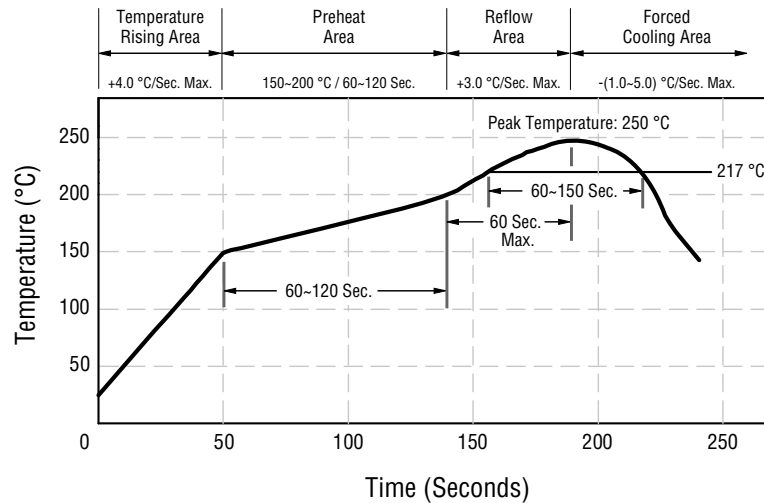
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SRR6040A Series - Shielded Power Inductors

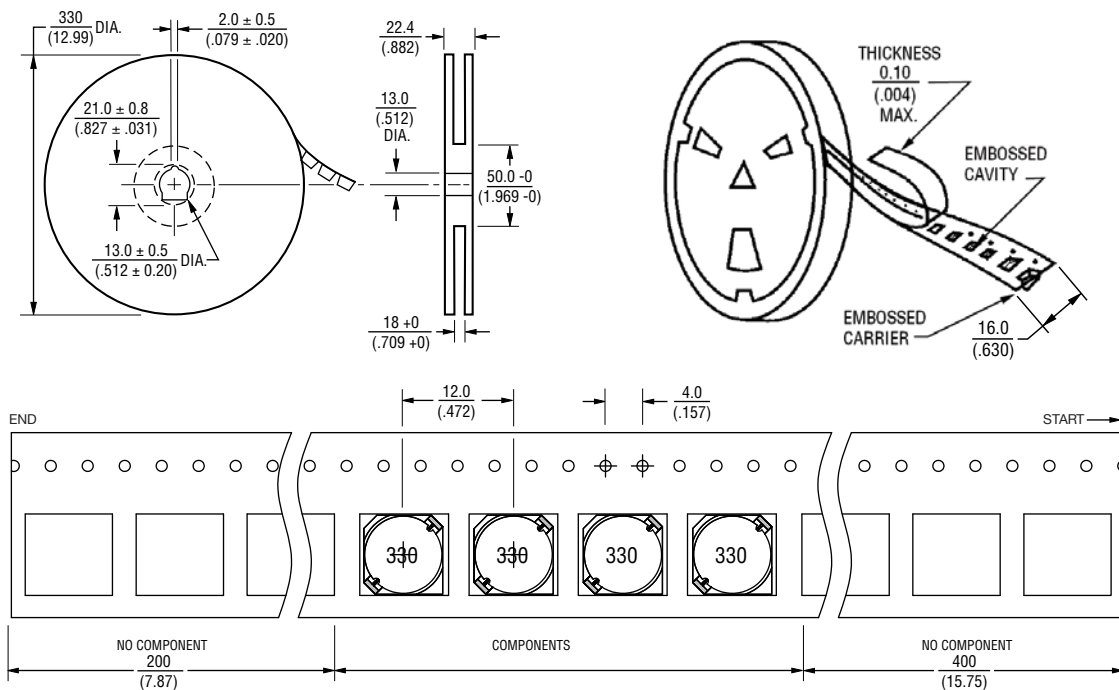
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Soldering Profile



Peak Temperature: 250 °C max.
 Max. Peak Temperature -5 °C: 30 sec. max.
 Max. Time Above 217 °C: 60~150 sec. max.

Packaging Specifications



USER DIRECTION OF FEED

QTY: 250 PCS. PER REEL

DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

REV. 02/17

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