

Features

- Height of 4.0 mm max.
- Current rating up to 3.5 A
- RoHS compliant*

Applications

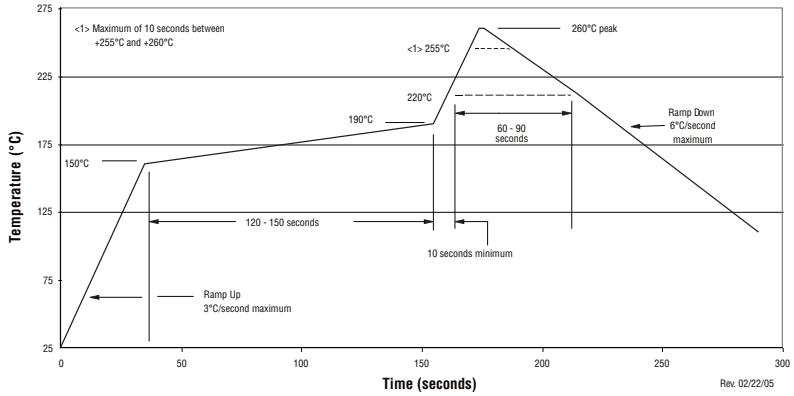
- Input/output of DC/DC converters
- Power supplies for:
  - Portable communication equipment
  - Camcorders
  - LCD TVs

SRR6038 Series - Shielded SMD Power Inductors

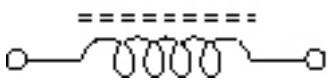
Electrical Characteristics

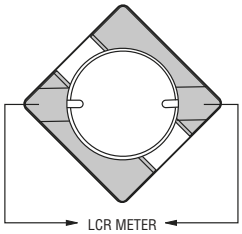
Bourns Part Number	Inductance 100 kHz (µH)	Tol. %	Q Ref.	Test Frequency (MHz)	SRF Typ. (MHz)	DCR Max. (mΩ)	I rms (A)	I sat (A)
SRR6038-3R3Y	3.3	±30	9.8	7.96	75.9	20	3.50	3.60
SRR6038-5R0Y	5.0	±30	8.9	7.96	42.6	24	2.90	2.95
SRR6038-6R2Y	6.2	±30	9.0	7.96	42.3	27	2.50	2.60
SRR6038-7R4Y	7.4	±30	7.5	7.96	32.9	31	2.30	2.55
SRR6038-8R2Y	8.2	±30	7.4	7.96	29.6	34	2.20	2.45
SRR6038-8R7Y	8.7	±30	7.3	7.96	27.5	34	2.20	2.35
SRR6038-100Y	10	±30	8.8	2.52	24.9	38	2.00	2.05
SRR6038-120Y	12	±30	8.3	2.52	17.9	53	1.70	1.95
SRR6038-150Y	15	±30	8.6	2.52	18.0	57	1.60	1.90
SRR6038-180Y	18	±30	8.0	2.52	13.8	92	1.50	1.70
SRR6038-220Y	22	±30	8.8	2.52	13.9	96	1.30	1.60
SRR6038-270Y	27	±30	7.7	2.52	12.5	109	1.20	1.30
SRR6038-330Y	33	±30	8.6	2.52	12.5	124	1.10	1.20
SRR6038-390Y	39	±30	8.3	2.52	11.8	138	1.00	1.10
SRR6038-470Y	47	±30	8.5	2.52	10.4	155	0.95	1.00
SRR6038-560Y	56	±30	8.2	2.52	8.8	202	0.85	0.90
SRR6038-680Y	68	±30	7.4	2.52	7.5	234	0.75	0.87
SRR6038-820Y	82	±30	7.6	2.52	7.6	324	0.70	0.75
SRR6038-101Y	100	±30	6.7	0.796	6.2	358	0.65	0.68

Soldering Profile



Electrical Schematic





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

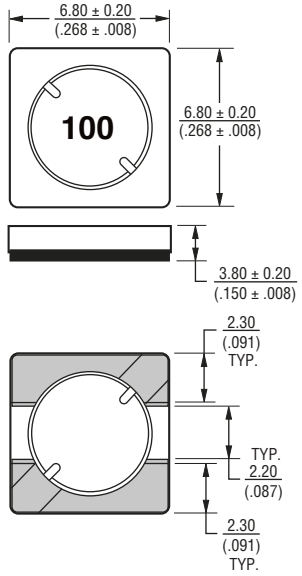
General Specifications

Test Voltage ..... 0.1 V
Reflow Soldering ...230 °C, 50 sec. max.
Operating Temp. .....-40 °C to +125 °C
(Temperature rise included)
Storage Temperature.. -40 °C to +125 °C
Resistance to Soldering Heat
..... 260 °C for 10 sec.
Moisture Sensitivity Level.....1
ESD Classification (HBM).....N/A

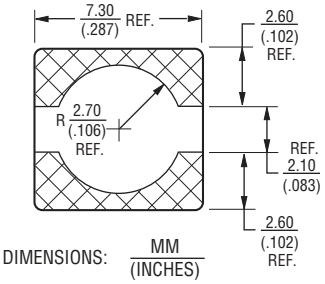
Materials

Core ..... Ferrite
Wire ..... Enameled copper
Adhesive.....Epoxy resin
Terminal..... Ag/Ni/Sn
Rated Current
.....Ind. drop 35 % typ. at Isat
Temperature Rise..... 30 °C typ.
at rated Irms
Packaging..... 1000 pcs. per reel

Product Dimensions



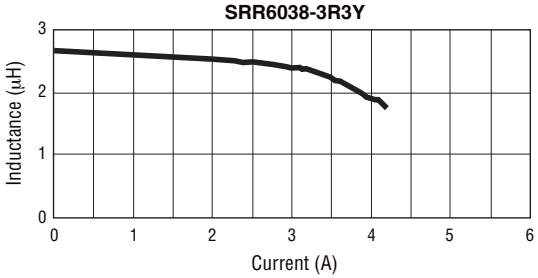
Recommended Layout



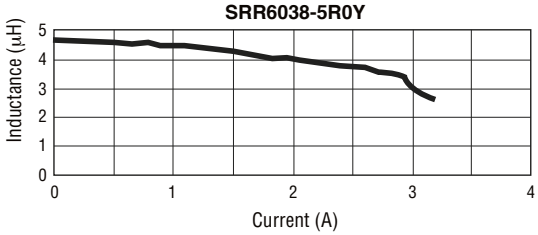
* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.
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Inductance vs. Current

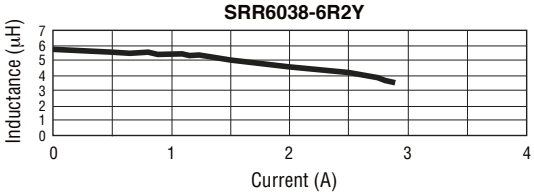
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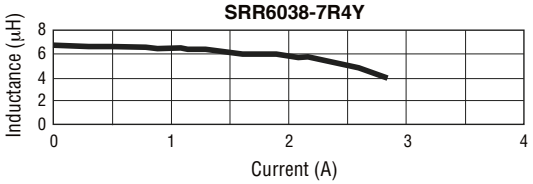
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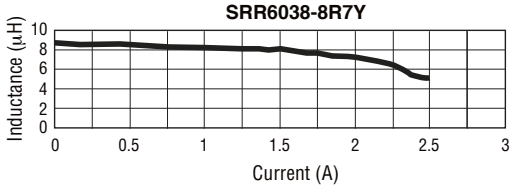
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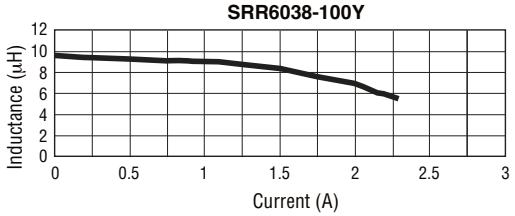
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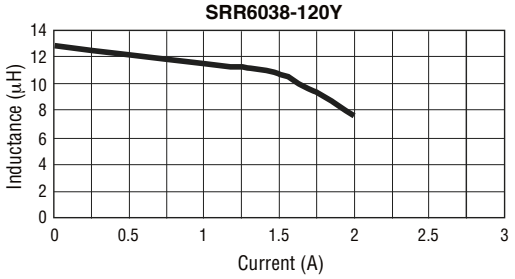
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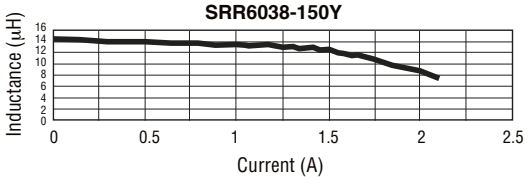
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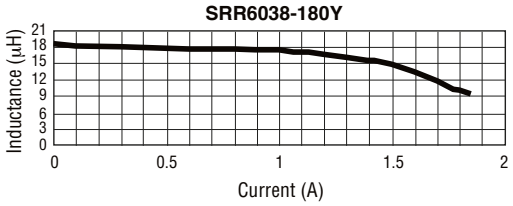
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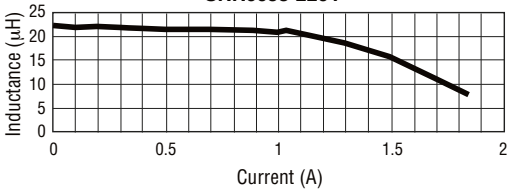
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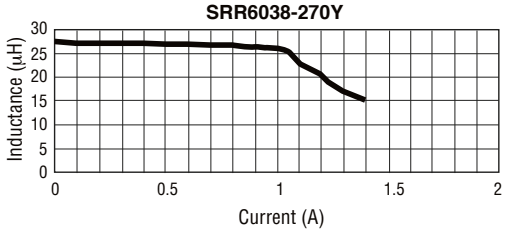
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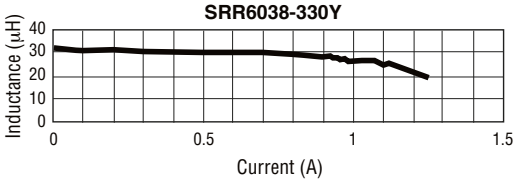
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SRR6038-270Y



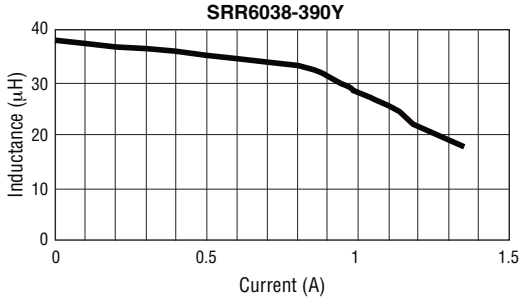
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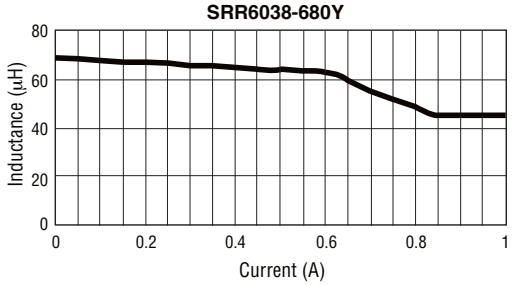
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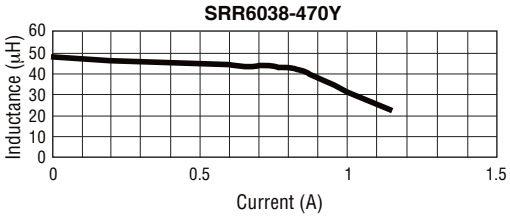
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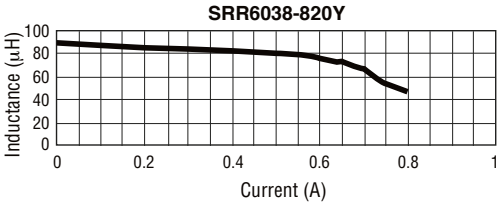
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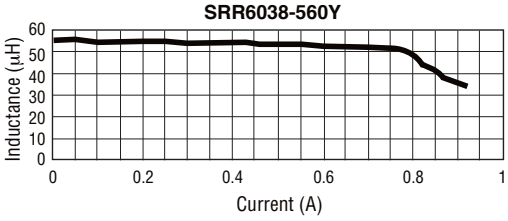
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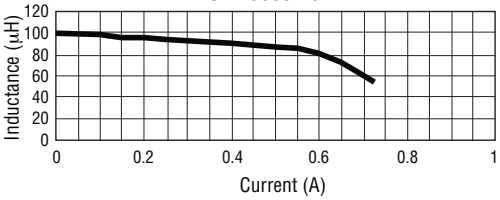
SRR6038-820Y



SRR6038-560Y

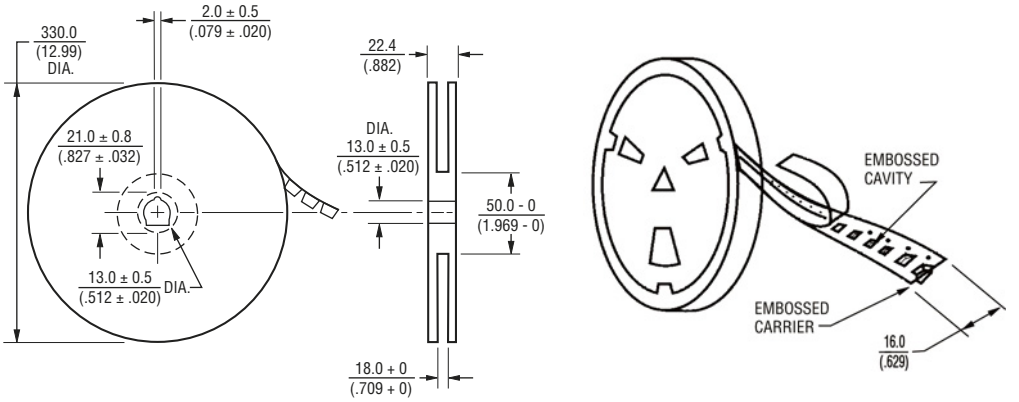


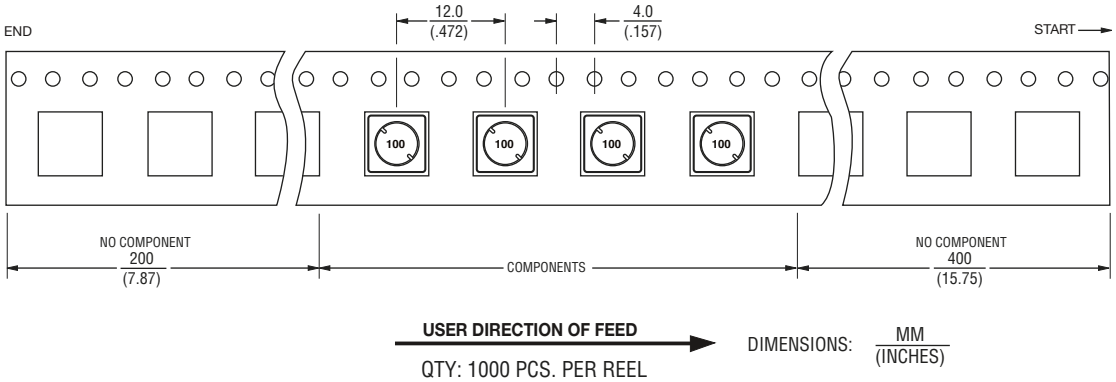
SRR6038-101Y



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