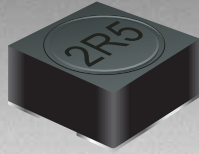


\*RoHS COMPLIANT



**BOURNS®**

## 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
  - Car radios

# SRR6038 Series - Shielded SMD Power Inductors

## Electrical Specifications

Bourns Part No.	Inductance 10 kHz / 1 V		Q Ref.	Test Frequency (MHz)	SRF Typ. (MHz)	DCR Max. (mΩ)	I <sub>rms</sub> (A)	I <sub>sat</sub> (A)
	(μH)	Tol. %						
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

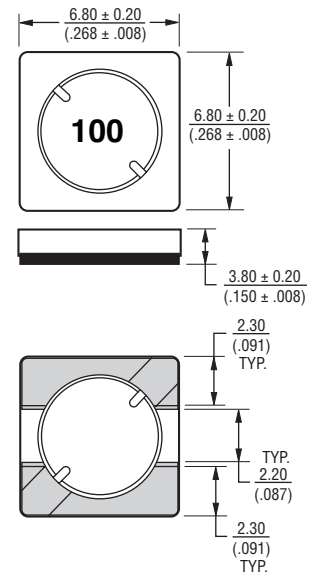
## General Specifications

Reflow Soldering .....230 °C; 50 sec max.  
 Operating Temperature ..-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

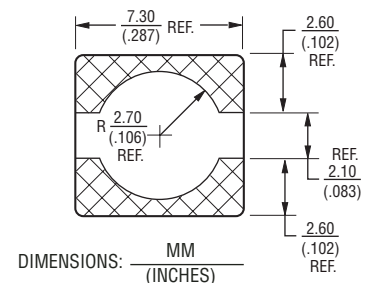
## Materials

Core Material.....Ferrite  
 Wire .....Enameled Copper  
 Adhesive.....Epoxy Resin  
 Terminal.....Ag/Ni/Sn  
 Rated Current .....Ind. drop of 35 % typ.  
 at I<sub>sat</sub>  
 Temperature Rise.....30 °C typ. at I<sub>rms</sub>  
 Packaging.....1000 pcs. per reel

## Product Dimensions

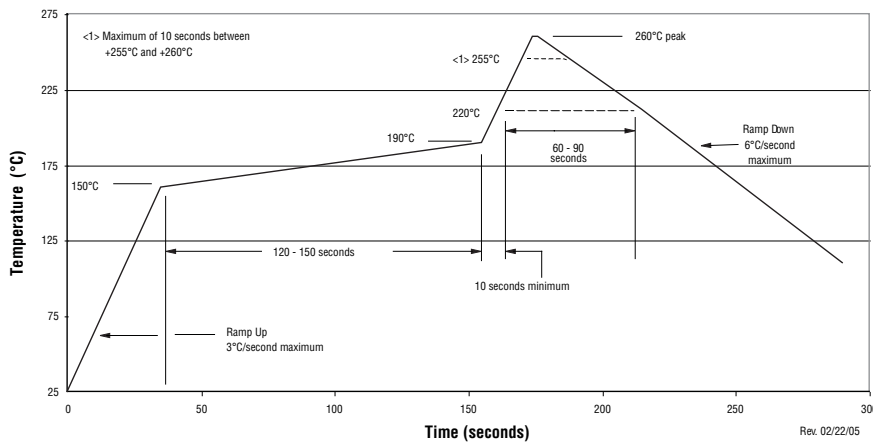


## Recommended Layout

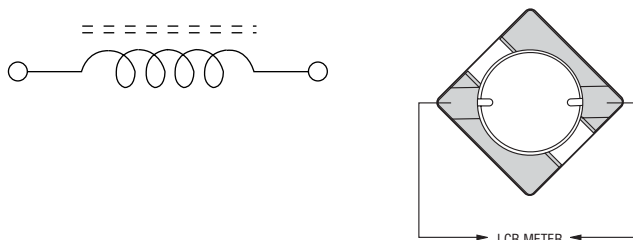


\*RoHS Directive 2002/95/EC Jan 27 2003 including Annex  
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 Customers should verify actual device performance in their specific applications.

## Soldering Profile



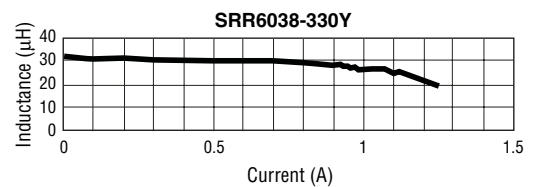
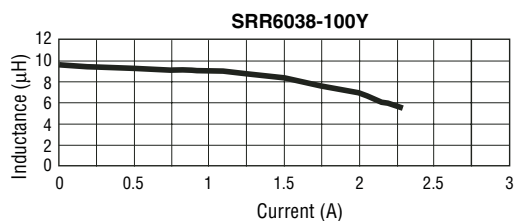
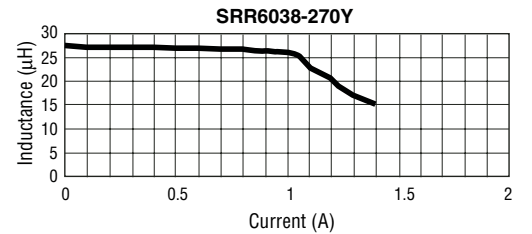
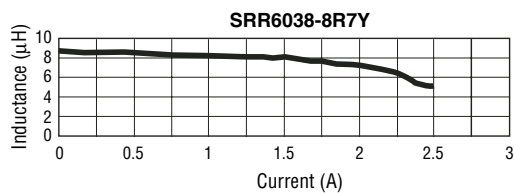
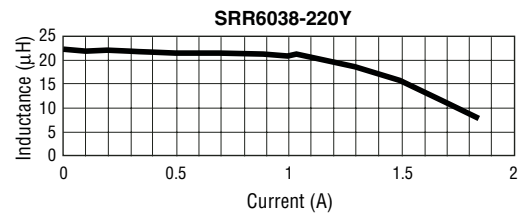
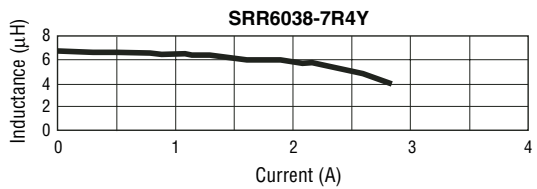
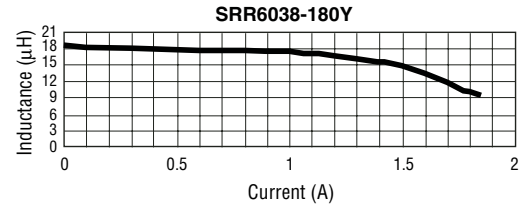
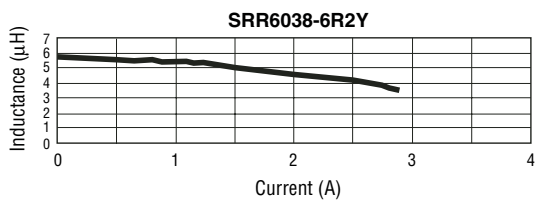
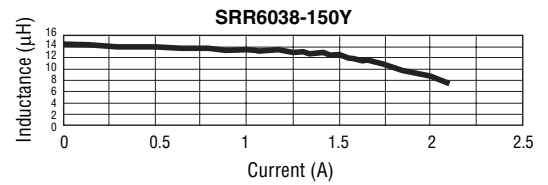
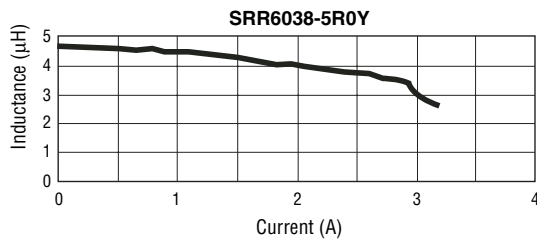
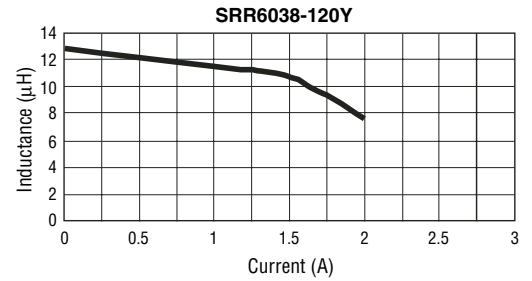
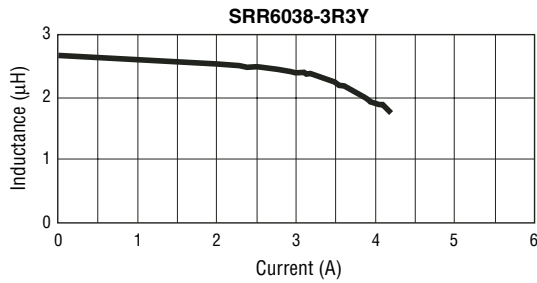
## Electrical Schematic



# SRR6038 Series - Shielded SMD Power Inductors

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## Inductance vs. Current

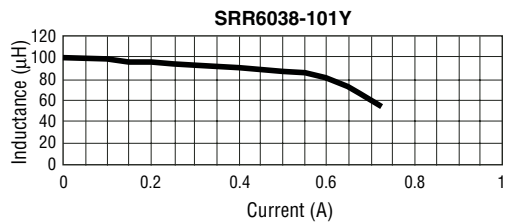
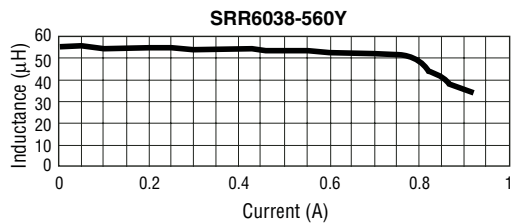
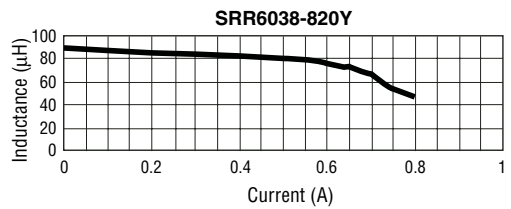
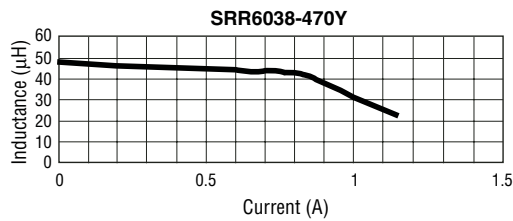
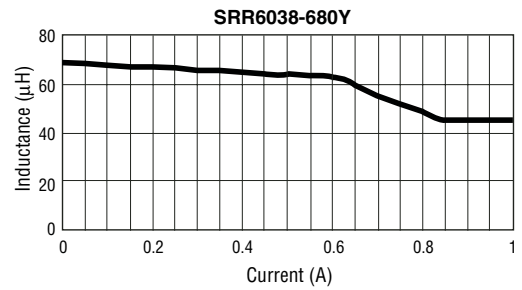
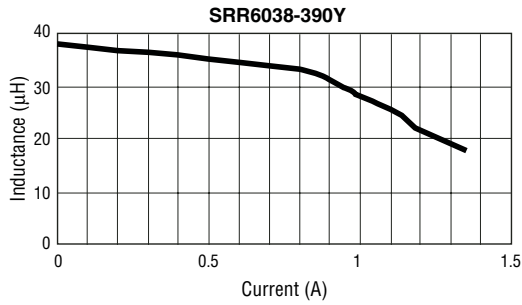


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# SRR6038 Series - Shielded SMD Power Inductors

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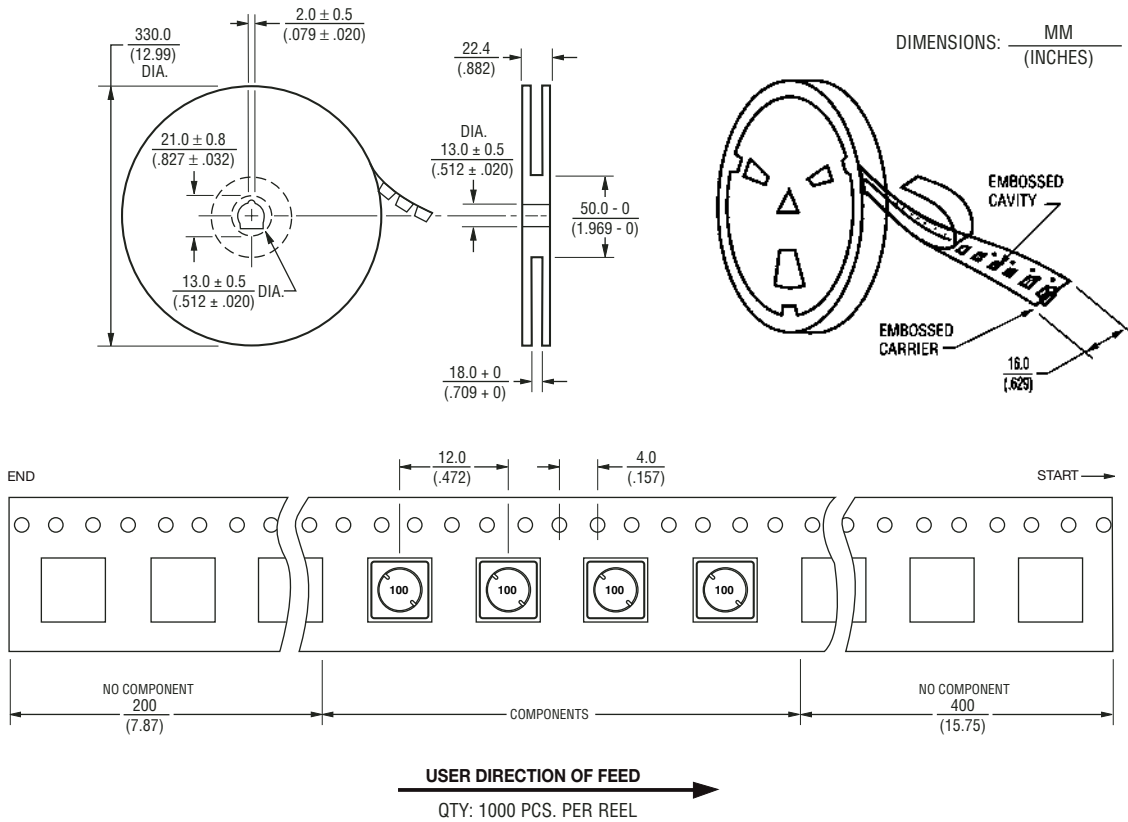
## Inductance vs. Current



# SRR6038 Series - Shielded SMD Power Inductors

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## Packaging Specifications



REV. 08/17

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