

#### **Features**

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

### **Applications**

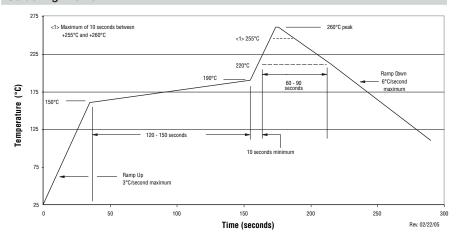
- Input/output of DC/DC converters
- Power supplies for:
  - · Portable communication equipment
  - Camcorders
  - LCD TVs
  - · Car radios

# **SRR6038 Series - Shielded SMD Power Inductors**

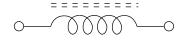
#### **Electrical Specifications**

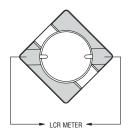
Bourns Part No.	Inductance 100 kHz		Q	Test	SRF	DCR		
	(μΗ)	Tol. %	Ref.	Frequency (MHz)	Typ. (MHz)	Max. (mΩ)	Irms (A)	Isat (A)
SRR6038-3R3Y	3.3	±30	9.8	7.96	75.9	20	3.50	3.60
SRR6038-5R0Y	5.0	±30	8.9	7.96	42.6	24	2.90	2.95
SRR6038-6R2Y	6.2	±30	9.0	7.96	42.3	27	2.50	2.60
SRR6038-7R4Y	7.4	±30	7.5	7.96	32.9	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**





#### **General Specifications**

Resistance to Soldering Heat

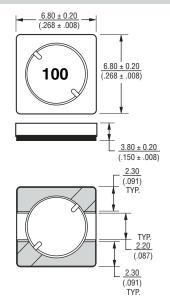
......260 °C for 10 sec.

### Materials

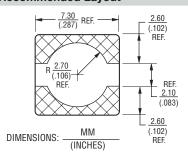
Core Material Ferrite
Wire Enameled Copper
Adhesive Epoxy Resin
Terminal Ag/Ni/Sn
Rated Current Ind. drop of 35 % typ.
at Isat

Temperature Rise......30 °C typ. at Irms Packaging......1000 pcs. per reel

#### **Product Dimensions**



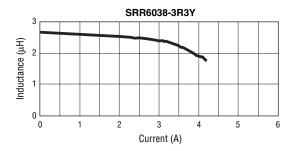
#### **Recommended Layout**

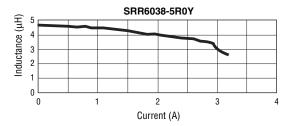


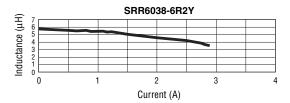
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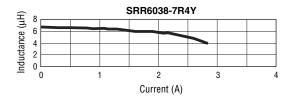
## **BOURNS**®

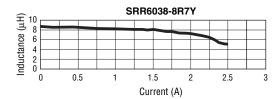
#### Inductance vs. Current

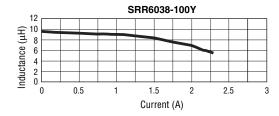


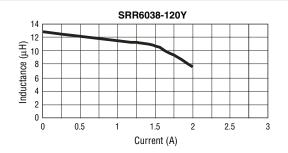


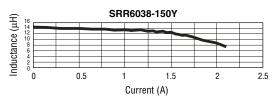


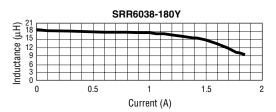


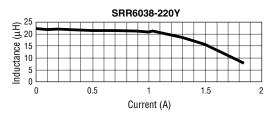


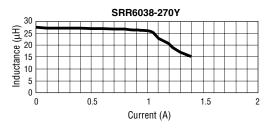


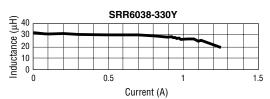








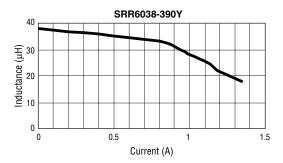


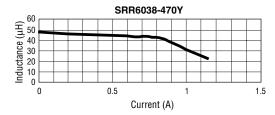


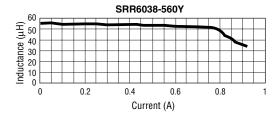
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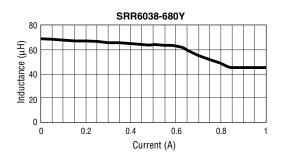
### BOURNS

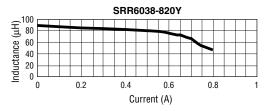
### Inductance vs. Current

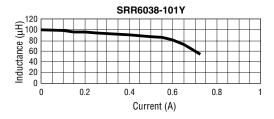












#### **Packaging Specifications**

