



**THE DATASHEET OF
SRP5030T-6R8M**





Features

- Shielded construction
- Iron powder core
- High saturation current
- Inductance range: 0.33 to 15 μ H
- Rated current up to 14 A
- RoHS compliant* and halogen free**

Applications

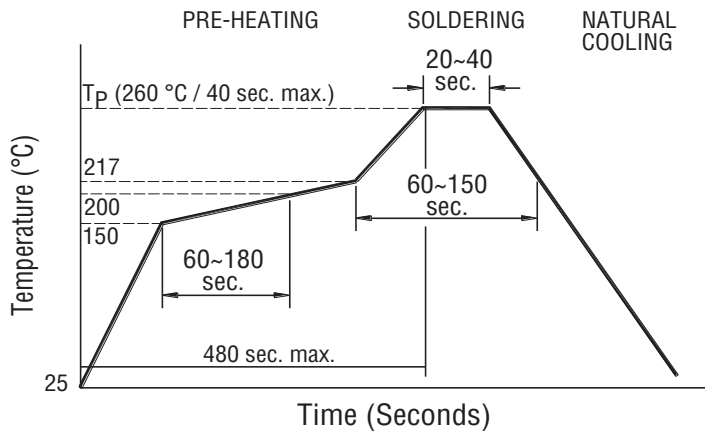
- DC/DC converters
- Power supplies for:
 - Portable communications equipment
 - Laptop computers
 - Camcorders, HDTV
 - Video game consoles

SRP5030T Series - Shielded Power Inductors

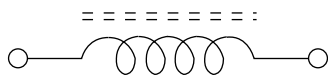
Electrical Specifications

Bourns Part No.	Inductance L (μ H) $\pm 20\%$	DCR (m Ω) Max.	I rms (A)	I sat (A)
SRP5030T-R33M	0.33	5	14	18
SRP5030T-R47M	0.47	7.4	12	16
SRP5030T-R68M	0.68	12	8.5	14
SRP5030T-1R0M	1.0	14	7	11
SRP5030T-1R2M	1.2	16	6.5	11
SRP5030T-1R5M	1.5	25	6	10
SRP5030T-2R2M	2.2	35	5.5	9
SRP5030T-3R3M	3.3	38	5	8
SRP5030T-4R7M	4.7	53	4.6	6
SRP5030T-5R6M	5.6	63	4.25	4.5
SRP5030T-6R8M	6.8	76.2	4	4.3
SRP5030T-100M	10	128	2.75	3.5
SRP5030T-150M	15	190	2.1	2.6

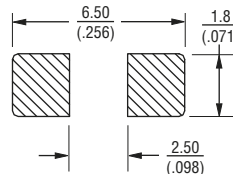
Soldering Profile



Electrical Schematic



Recommended Layout



General Specifications

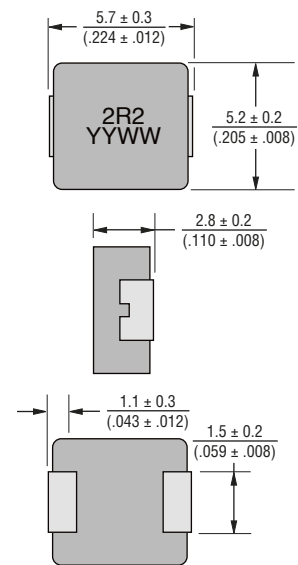
Test Voltage 1.0 V
 Test Frequency 100 KHz
 Operating Temperature -40 °C to +125 °C
 (Temperature rise included)
 Storage Temperature -40 °C to +125 °C
 Resistance to Soldering Heat +260 °C, 40 sec. max.
 Moisture Sensitivity Level 1
 ESD Classification (HBM) N/A

¹ Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

Materials

Core Iron powder
 Wire Enameled copper
 Terminal Sn
 Rated Current Ind. drops 20 % typ. at I_{sat}
 Temperature Rise 40 °C typ. at rated I_{rms}
 Packaging 2000 pcs. per 13-inch reel

Product Dimensions



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



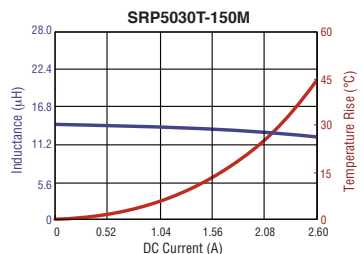
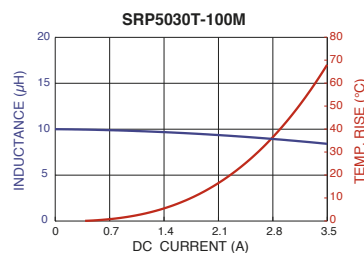
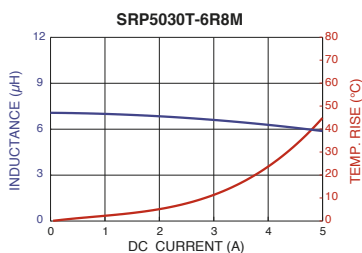
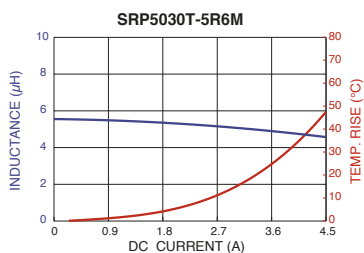
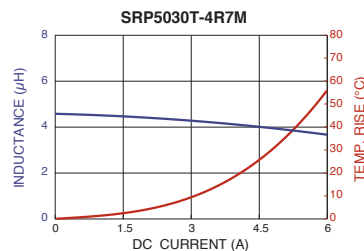
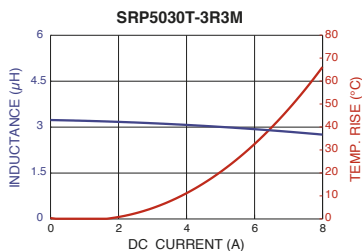
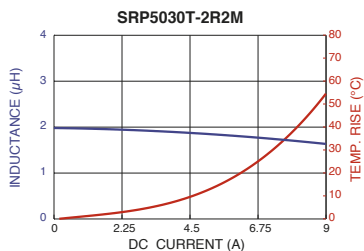
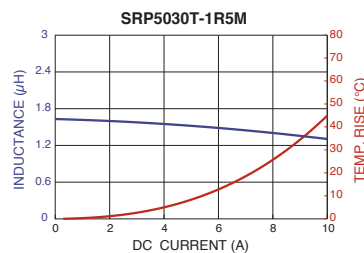
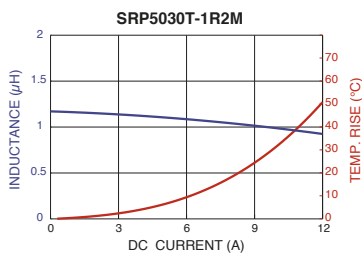
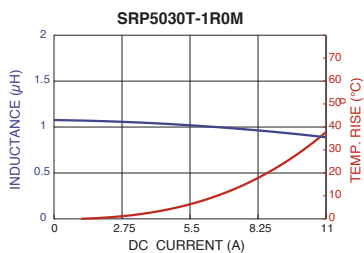
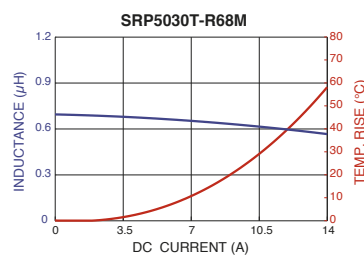
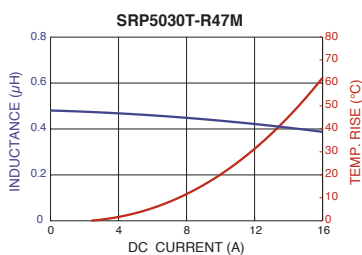
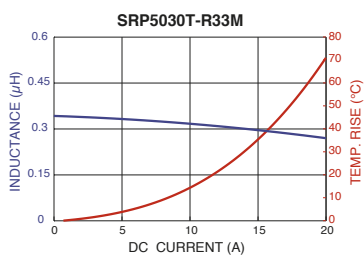
WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

* 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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SRP5030T Series - Shielded Power Inductors

BOURNS®

L vs. I Charts



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