

Features

- Shielded construction
- Iron powder core
- High saturation current
- Inductance range: 0.33 to 15 µH
- 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

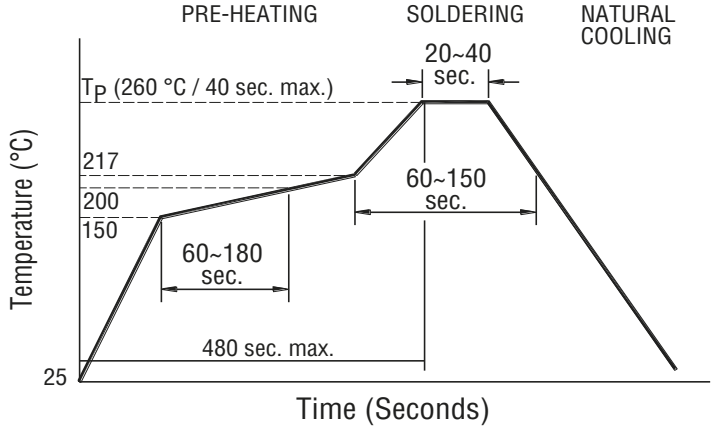
Bourns Part No.	Inductance L (µH) ±20 %	DCR (mΩ) Max.	I rms (A)	I sat (A)
SRP5030T-R33M	0.33	5	14	18
SRP5030T-R47M	0.47	7.4	12	16
SRP5030T-R68M	0.68	12	8.5	14
SRP5030T-1R0M	1.0	14	7	11
SRP5030T-1R2M	1.2	16	6.5	11
SRP5030T-1R5M	1.5	25	6	10
SRP5030T-2R2M	2.2	35	5.5	9
SRP5030T-3R3M	3.3	38	5	8
SRP5030T-4R7M	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

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.

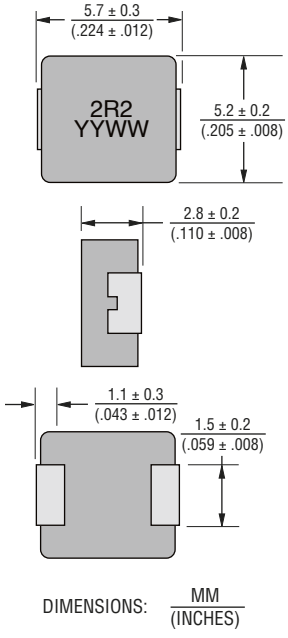
Soldering Profile



Materials

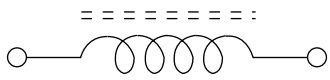
Core ..... Iron powder
Wire ..... Enameled copper
Terminal ..... Sn
Rated Current ..... Ind. drops 20 % typ. at Isat
Temperature Rise ..... 40 °C typ. at rated Irms
Packaging ..... 2000 pcs. per 13-inch reel

Product Dimensions

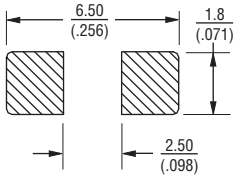


DIMENSIONS: MM / (INCHES)

Electrical Schematic



Recommended Layout



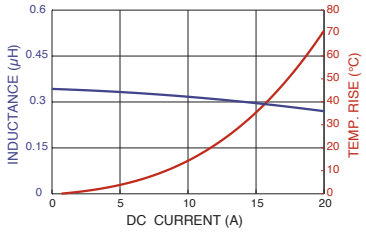
WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

* 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.

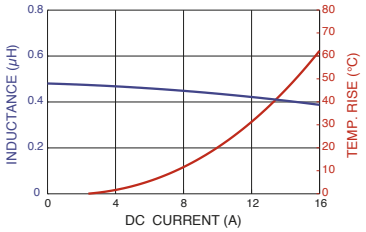
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L vs. I Charts

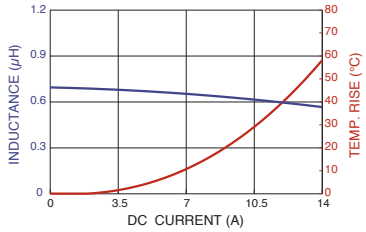
SRP5030T-R33M



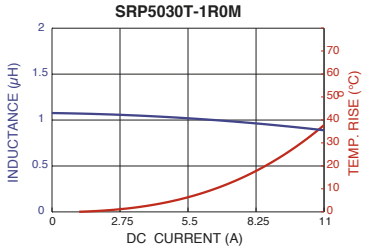
SRP5030T-R47M



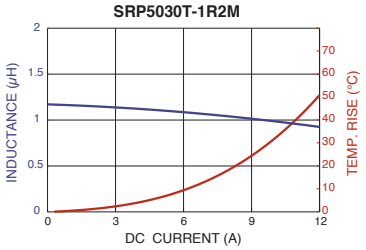
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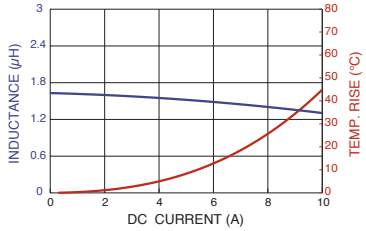
SRP5030T-1R0M



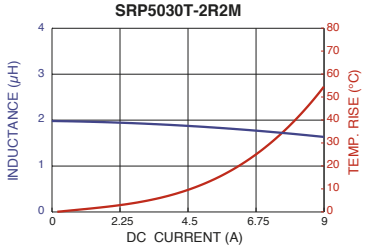
SRP5030T-1R2M



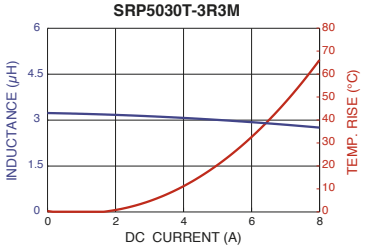
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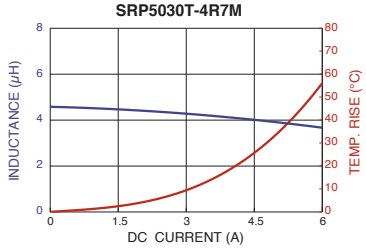
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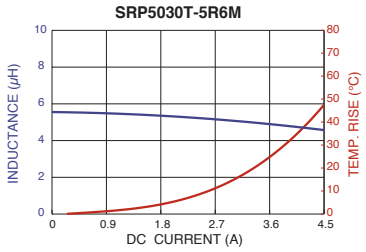
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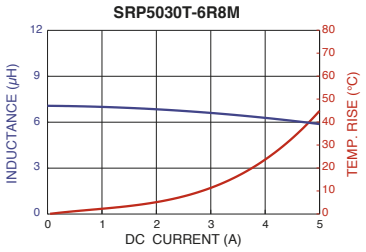
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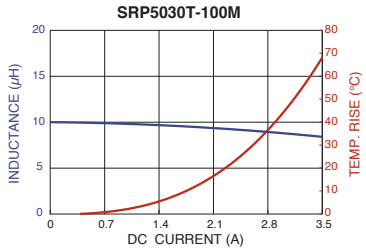
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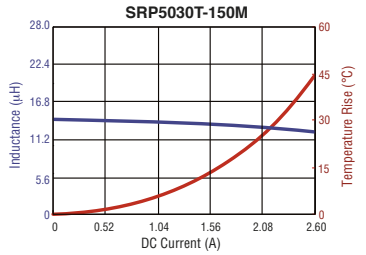
SRP5030T-6R8M



SRP5030T-100M

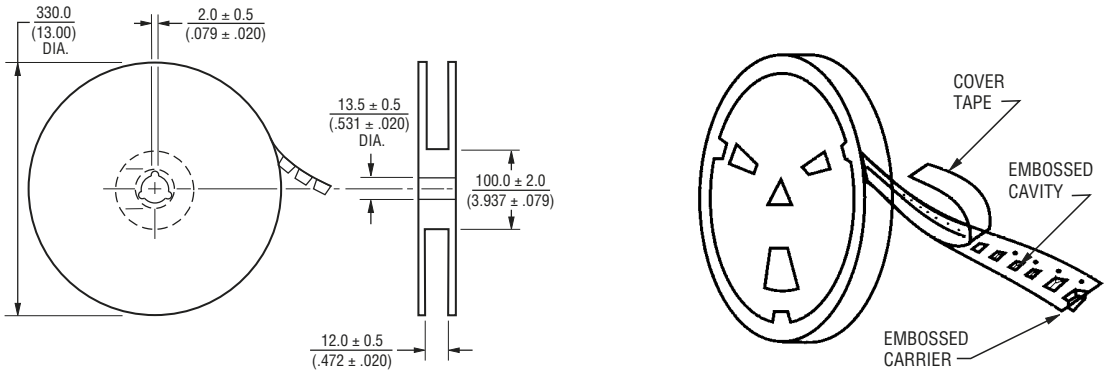


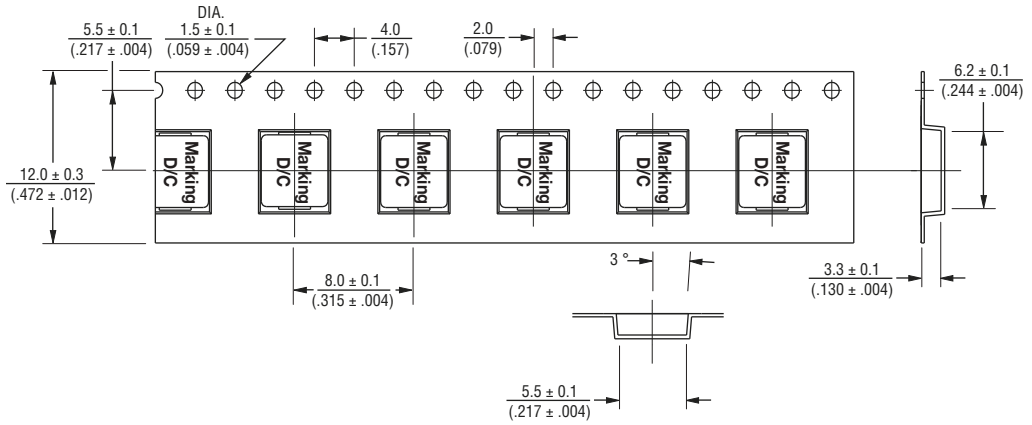
SRP5030T-150M



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Packaging Specifications





USER DIRECTION OF FEED

2000 PIECES PER REEL

DIMENSIONS: MM / (INCHES)

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