



**THE DATASHEET OF  
SRP5030T-4R7M**





## Features

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

## Applications

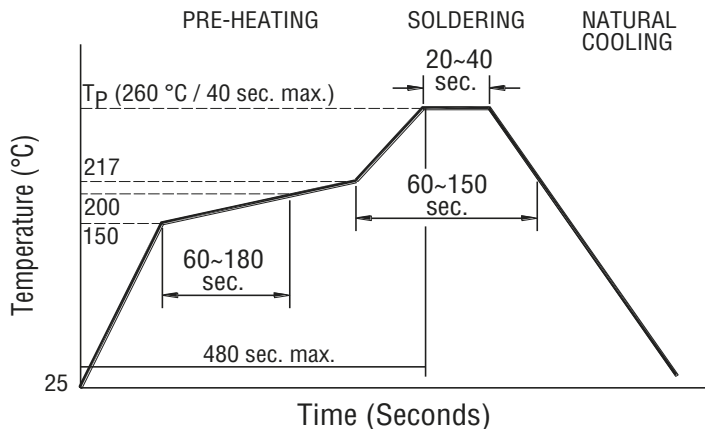
- DC/DC converters
- Power supplies for:
  - Portable communications equipment
  - Laptop computers
  - Camcorders, HDTV
  - Video game consoles

# SRP5030T Series - Shielded Power Inductors

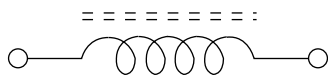
## Electrical Specifications

| Bourns Part No. | Inductance L ( $\mu$ H) $\pm 20\%$ | DCR (m $\Omega$ ) 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       |

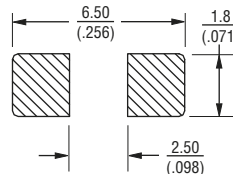
## Soldering Profile



## Electrical Schematic



## Recommended Layout



## General Specifications

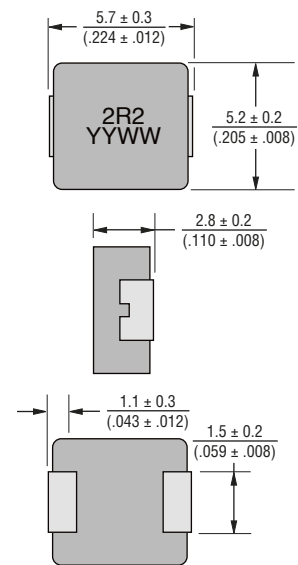
Test Voltage ..... 1.0 V  
 Test Frequency ..... 100 KHz  
 Operating Temperature ..... -40 °C to +125 °C  
 (Temperature rise included)  
 Storage Temperature ..... -40 °C to +125 °C  
 Resistance to Soldering Heat ..... +260 °C, 40 sec. max.  
 Moisture Sensitivity Level ..... 1  
 ESD Classification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

<sup>1</sup> 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 Isat  
 Temperature Rise ..... 40 °C typ. at rated Irms  
 Packaging ..... 2000 pcs. per 13-inch reel

## Product Dimensions



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



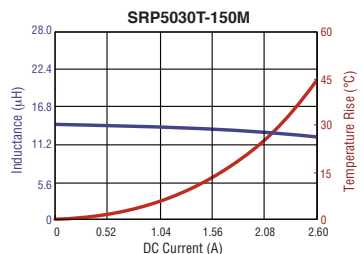
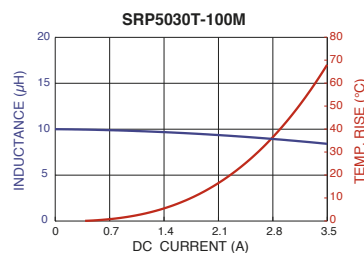
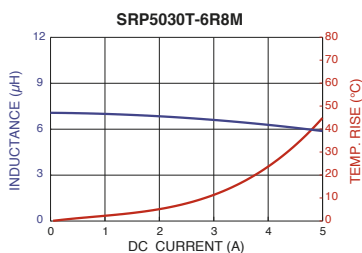
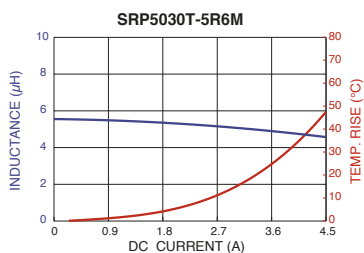
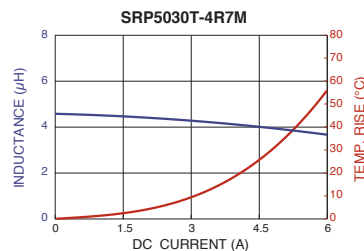
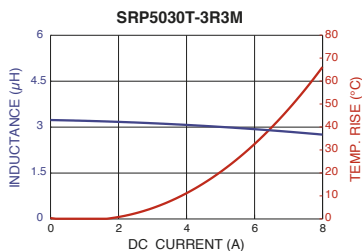
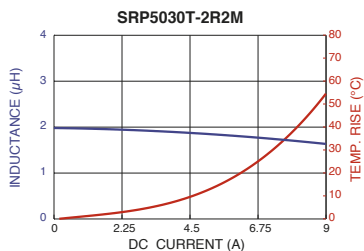
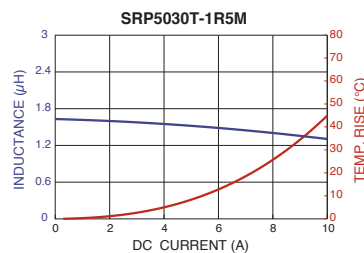
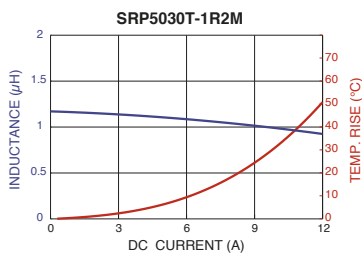
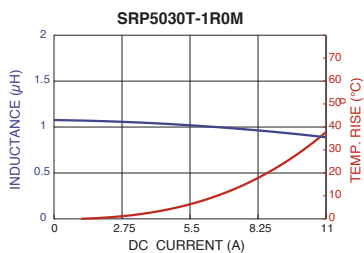
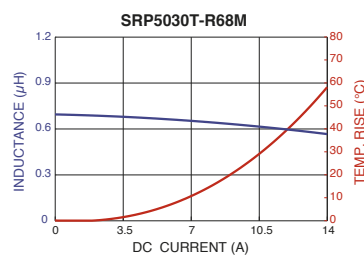
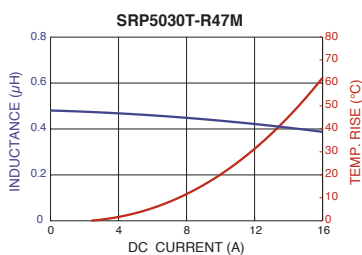
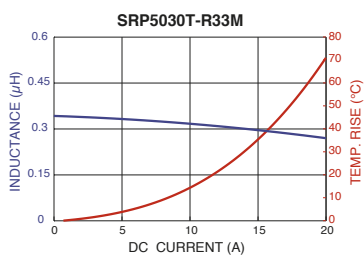
**WARNING Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)**

\* 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

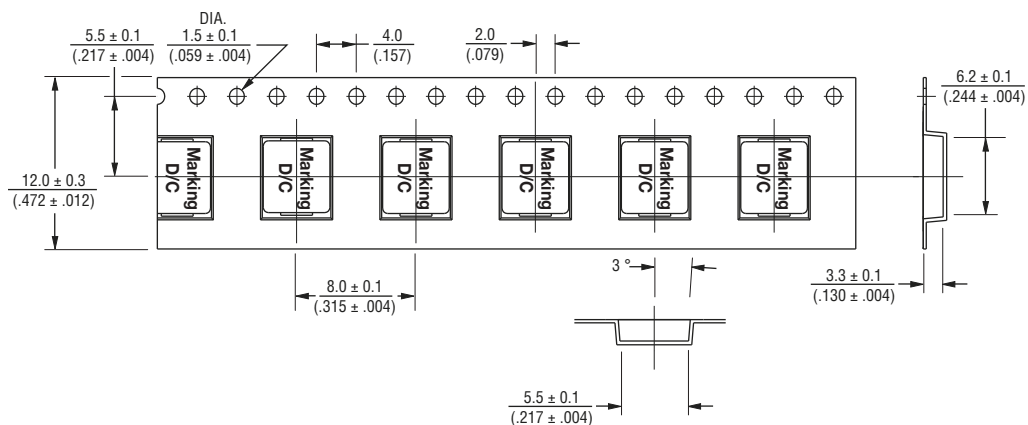
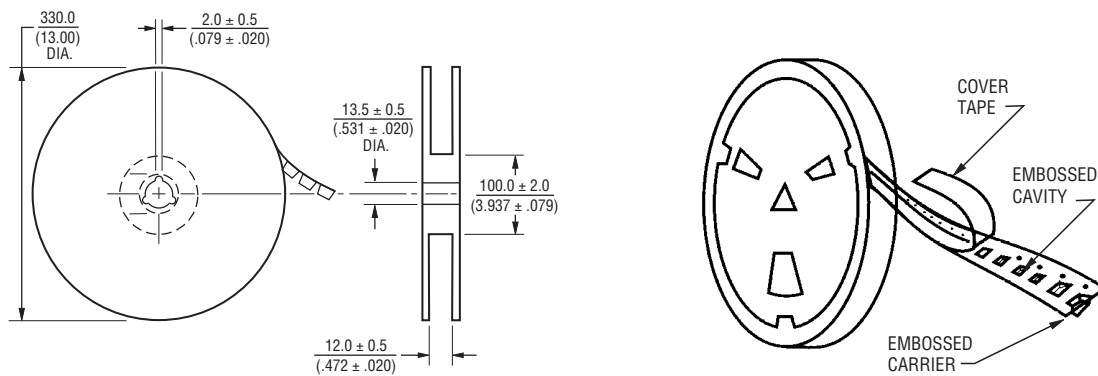


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# SRP5030T Series - Shielded Power Inductors

**BOURNS®**

## Packaging Specifications



USER DIRECTION OF FEED

2000 PIECES PER REEL

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

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