



### 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

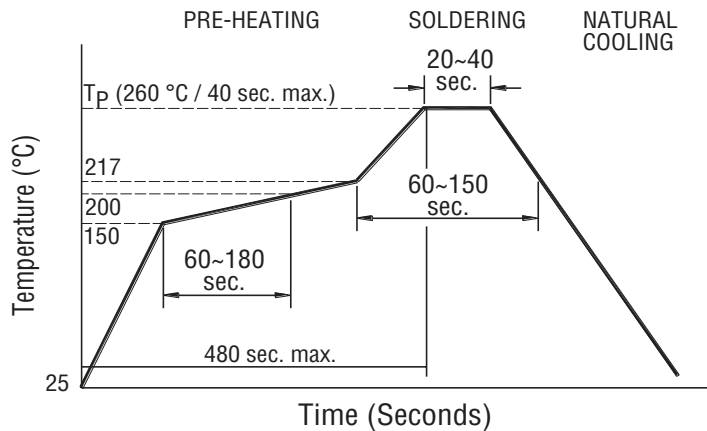
Bourns Part No.	Inductance L ( $\mu$ H) $\pm 20$ %	DCR (m $\Omega$ ) Max.	I rms (A)	I sat (A)
SRP5030T-R33M	0.33	5	14	18
SRP5030T-R47M	0.47	7.4	12	16
SRP5030T-R68M	0.68	12	8.5	14
SRP5030T-1R0M	1.0	14	7	11
SRP5030T-1R2M	1.2	16	6.5	11
SRP5030T-1R5M	1.5	25	6	10
SRP5030T-2R2M	2.2	35	5.5	9
SRP5030T-3R3M	3.3	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

### 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.

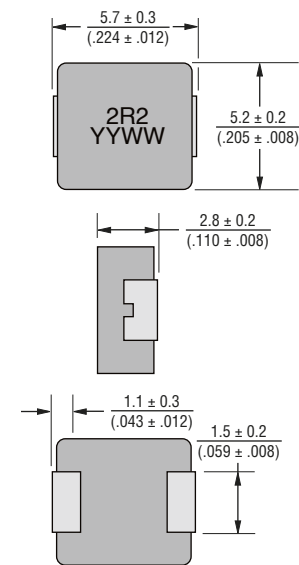
### Soldering Profile



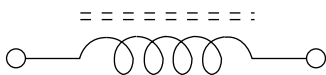
### Materials

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

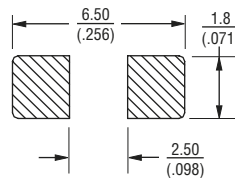
### Product Dimensions



### Electrical Schematic



### Recommended Layout



**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. Specifications are subject to change without notice. Users should verify actual device performance in their specific applications. The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at [www.bourns.com/docs/legal/disclaimer.pdf](http://www.bourns.com/docs/legal/disclaimer.pdf)

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