



**THE DATASHEET OF  
SRP5030TA-100M**





## Features

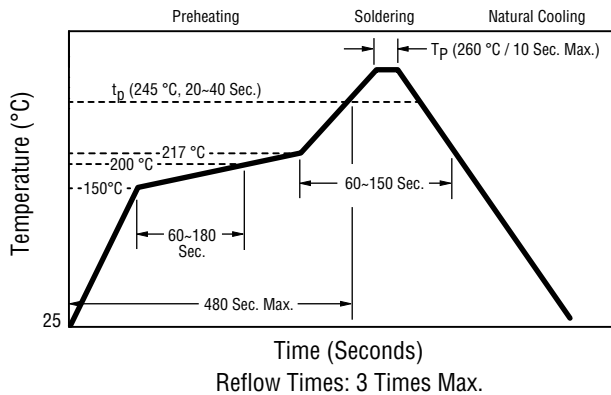
- Shielded construction
- Carbonyl powder core
- High saturation current
- Inductance range: 0.1 to 10  $\mu$ H
- AEC-Q200 compliant
- RoHS compliant\* and halogen free\*\*

## SRP5030TA Series - Shielded Power Inductors

### Electrical Specifications @ 25 °C

Bourns Part Number	Inductance @ 100 KHz / 1 V		Q (Min.) @ 100 KHz / 1 V	SRF (MHz) Typ.	DCR (m $\Omega$ ) Typ.	DCR (m $\Omega$ ) Max.	Irms (A)	Isat (A)	Terminal Type
	L ( $\mu$ H)	Tol. (%)							
SRP5030TA-R10Y	0.1	$\pm 30$	5	320	2.5	3	23	27	Lead Frame
SRP5030TA-R22M	0.22	$\pm 20$	5	155	3.7	4.4	15.5	21	
SRP5030TA-R33M	0.33	$\pm 20$	5	110	4.3	5	14	18	
SRP5030TA-R47M	0.47	$\pm 20$	10	100	6.4	7.4	12	16	
SRP5030TA-R68M	0.68	$\pm 20$	10	85	10	12	8.5	14	
SRP5030TA-1R0M	1.0	$\pm 20$	10	62	13	14	7	11	
SRP5030TA-1R2M	1.2	$\pm 20$	10	50	14	16	6.5	11	
SRP5030TA-1R5M	1.5	$\pm 20$	10	44	16	25	6	10	
SRP5030TA-2R2M	2.2	$\pm 20$	15	36	25	35	5.5	9	
SRP5030TA-3R3M	3.3	$\pm 20$	15	30	32	38	5	8	
SRP5030TA-3R6M	3.6	$\pm 20$	15	29	46	54	4.9	7	
SRP5030TA-4R7M	4.7	$\pm 20$	15	23	50	53	4.6	6	
SRP5030TA-5R6M	5.6	$\pm 20$	15	21	55	63	4.25	4.5	
SRP5030TA-6R8M	6.8	$\pm 20$	15	19	68	76.2	4	4.3	
SRP5030TA-100M	10	$\pm 20$	20	18	110	128	2.75	3.5	

### Soldering Profile

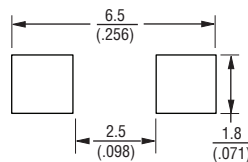


### How to Order

**SRP5030TA - 100 M**

Model \_\_\_\_\_  
 Value Code (see table) \_\_\_\_\_  
 Tolerance Code \_\_\_\_\_

### Recommended Layout



### Additional Information

Click these links for more information:



### General Specifications

Operating Temperature .....-55 °C to +150 °C  
 (Temperature rise included)  
 Storage Temperature .....-55 °C to +150 °C  
 Rated Current ..... Inductance drops 20 % at Isat  
 Temperature Rise .....40 °C at rated Irms  
 Moisture Sensivity Level ..... 1  
 ESD Classification (HBM)..... N/A

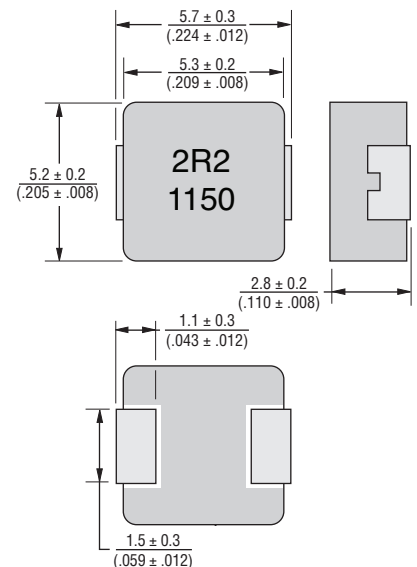
Note 1: Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

### Materials

Core ..... Carbonyl powder  
 Wire ..... Enameled copper  
 Terminal Finish ..... Sn  
 Packaging ..... 2000 pcs. per 13-inch reel

### Product Dimensions

#### Lead Frame Terminal



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



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

\* RoHS Directive 2015/863, Mar 31, 2015 and Annex.

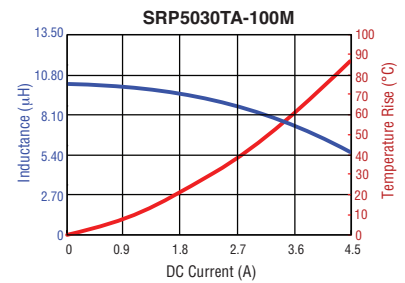
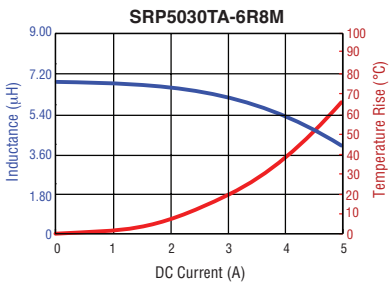
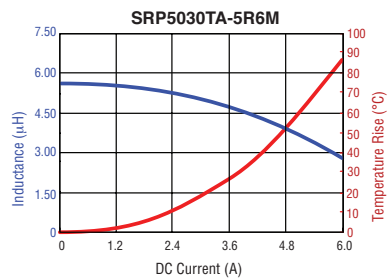
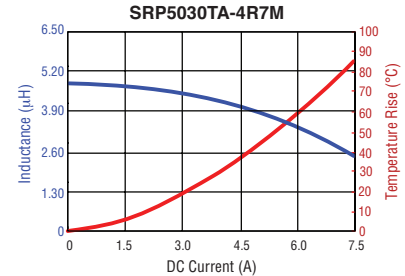
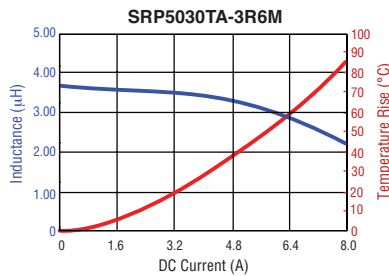
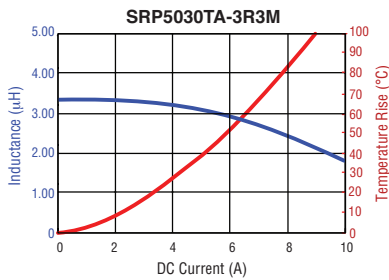
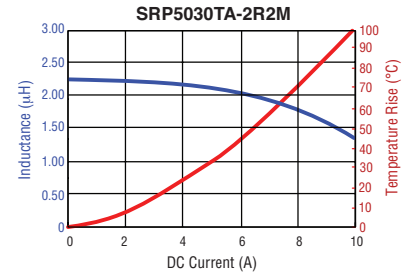
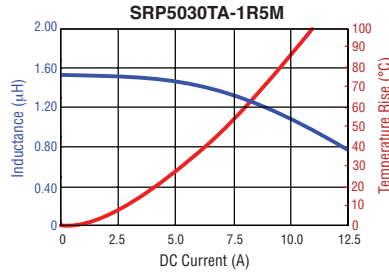
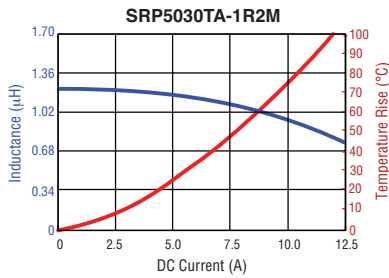
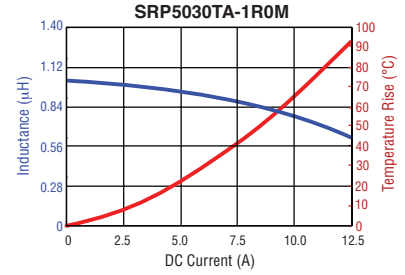
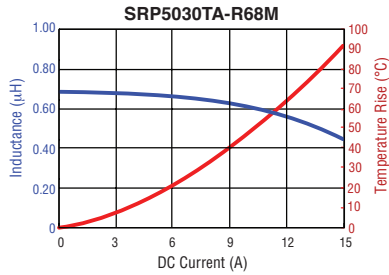
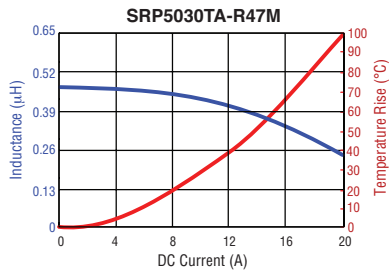
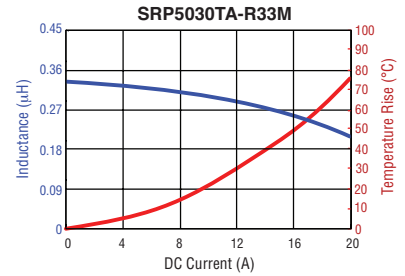
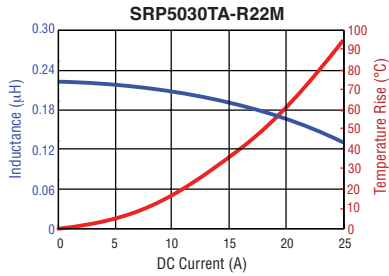
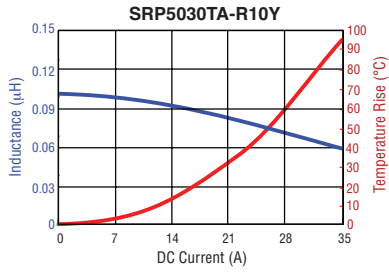
\*\* Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

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# SRP5030TA Series - Shielded Power Inductors



## L vs. I Charts



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