



**THE DATASHEET OF  
SRP5015TA-3R3M**





### Features

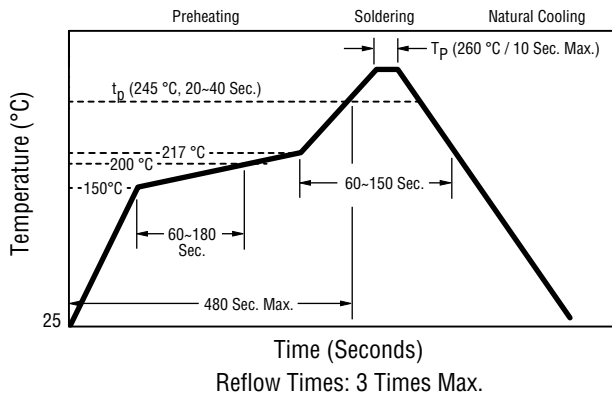
- Shielded construction
- Carbonyl powder core
- High saturation current
- Inductance range: 0.15 to 22  $\mu$ H
- AEC-Q200 qualified
- RoHS compliant\* and halogen free\*\*

## SRP5015TA 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.	I <sub>rms</sub> (A)	I <sub>sat</sub> (A)	Terminal Type
	L ( $\mu$ H)	Tol. (%)							
SRP5015TA-R15Y	0.15	$\pm 30$	5	220	3.6	4.1	16	25	Lead Frame
SRP5015TA-R20Y	0.20	$\pm 30$	5	180	3.8	4.2	15	22.5	
SRP5015TA-R22Y	0.22	$\pm 30$	5	165	5	6.5	12	20	
SRP5015TA-R33M	0.33	$\pm 20$	5	120	8.5	9.8	9	16	
SRP5015TA-R47M	0.47	$\pm 20$	5	110	12	13.8	8	15	
SRP5015TA-R68M	0.68	$\pm 20$	5	85	14	16.2	7	13	
SRP5015TA-1R0M	1.0	$\pm 20$	10	75	22	25.3	6	9	
SRP5015TA-1R5M	1.5	$\pm 20$	10	57	39	45	4.5	7	
SRP5015TA-2R2M	2.2	$\pm 20$	10	48	45	52	4	6	
SRP5015TA-3R3M	3.3	$\pm 20$	10	35	78	90	3.2	4.5	
SRP5015TA-4R7M	4.7	$\pm 20$	10	29	103	118	2.7	4	
SRP5015TA-5R6M	5.6	$\pm 20$	10	27	126	152	2.4	3.2	
SRP5015TA-6R8M	6.8	$\pm 20$	10	24	142	171	2.3	3	
SRP5015TA-8R2M	8.2	$\pm 20$	10	22	175	210	2.1	2.6	
SRP5015TA-100M	10	$\pm 20$	10	21	210	235	2	2.3	
SRP5015TA-220M	22	$\pm 20$	10	13	405	466	1.2	1.7	

### Soldering Profile

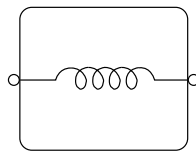


### How to Order

SRP5015TA - 100 M

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

### Schematic



### 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 I<sub>sat</sub>  
 Temperature Rise .....40 °C at rated I<sub>rms</sub>  
 Moisture Sensitivity Level ..... 1  
 ESD Classification (HBM)..... N/A

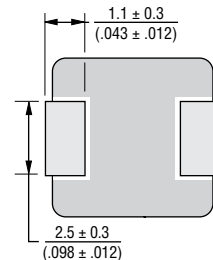
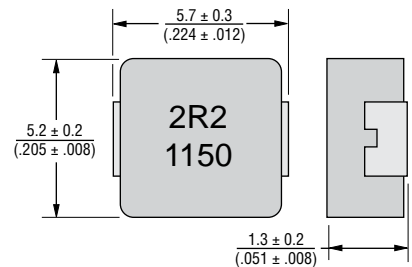
Note 1: Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

### Materials

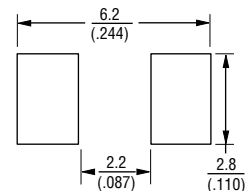
Core ..... Carbonyl powder  
 Wire ..... Enameled copper  
 Terminal Finish ..... Sn  
 Packaging ..... 3500 pcs. per 13-inch reel

### Product Dimensions

#### Lead Frame Terminal



### Recommended Layout



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.

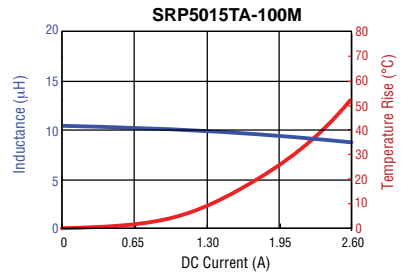
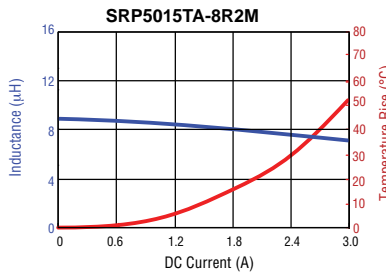
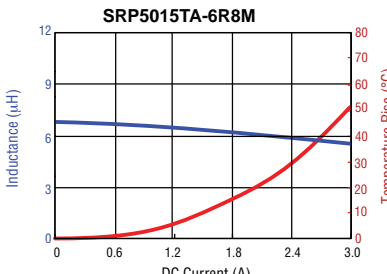
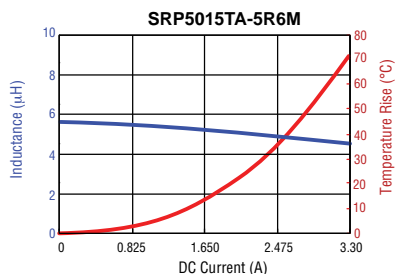
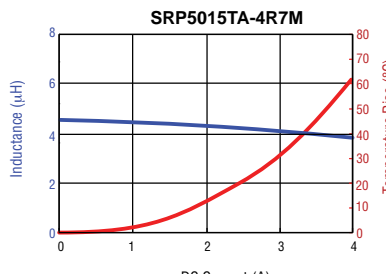
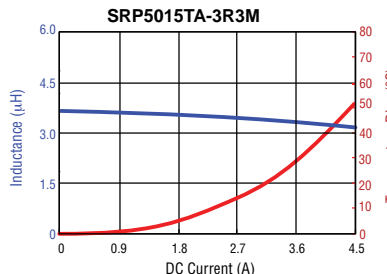
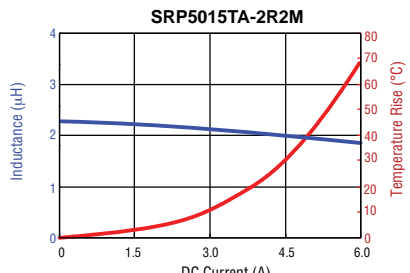
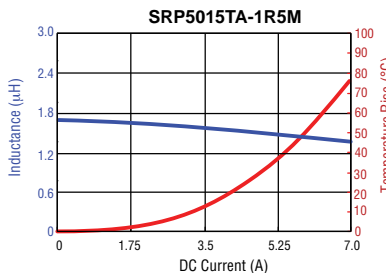
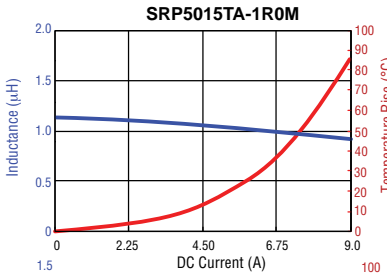
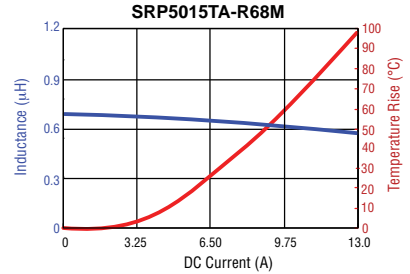
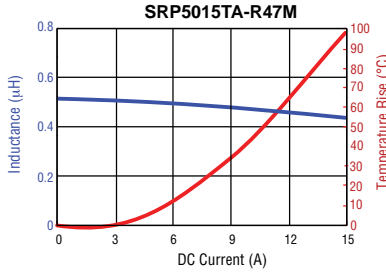
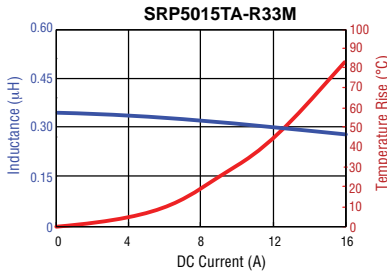
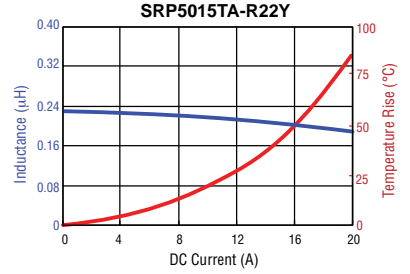
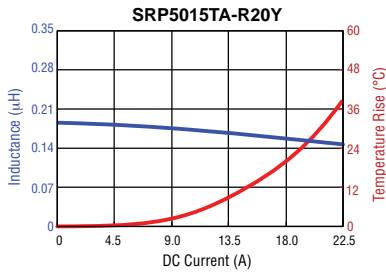
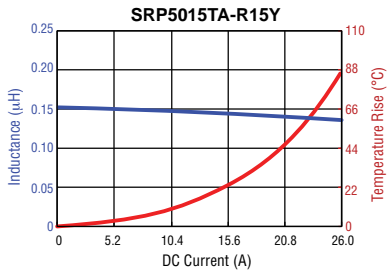
\*\* Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

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# SRP5015TA Series - Shielded Power Inductors



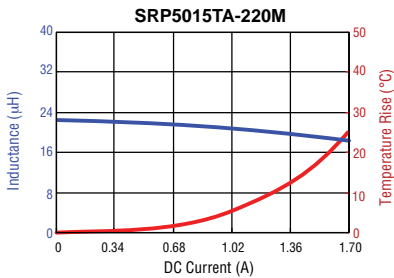
## L vs. I Charts



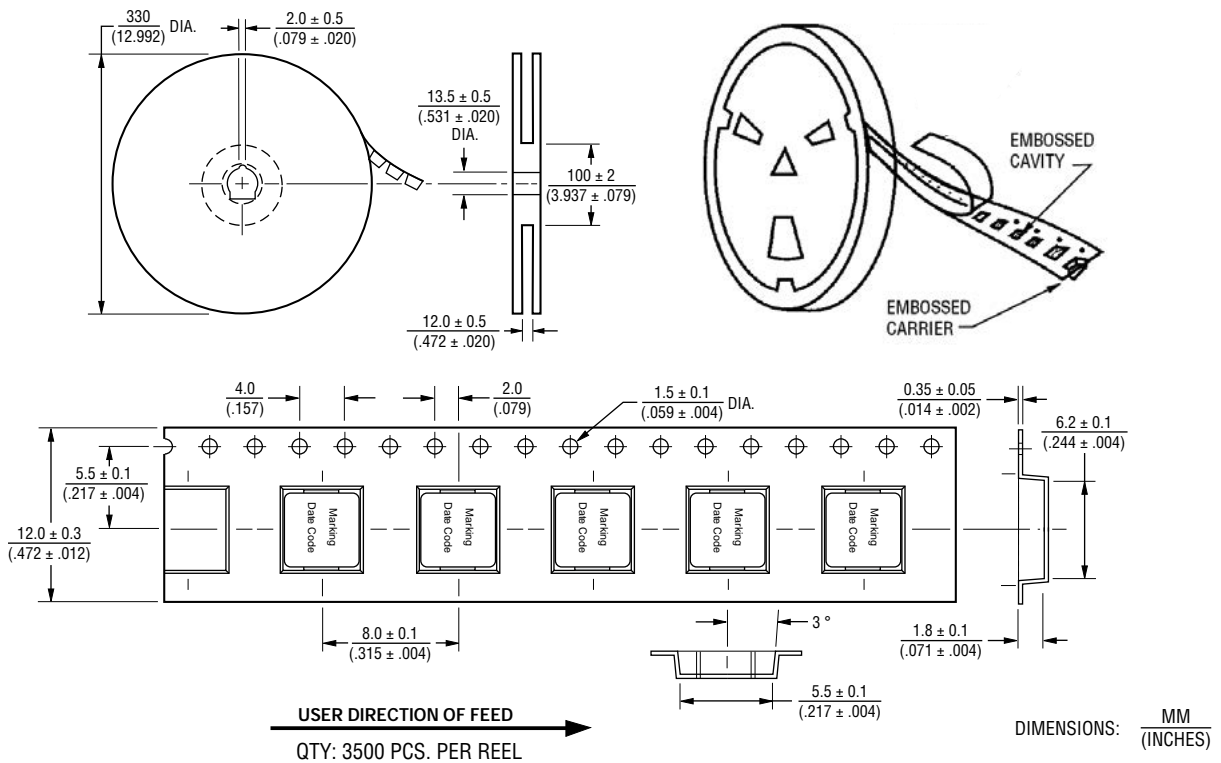
# SRP5015TA Series - Shielded Power Inductors



## L vs. I Charts (Continued)



## Packaging Specifications



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