



### 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\*\*

### Applications

- Automotive systems:
  - Driver assistant
  - Information
  - Entertainment
  - Lighting
- DC/DC converters
- Power supplies

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

### General Specifications

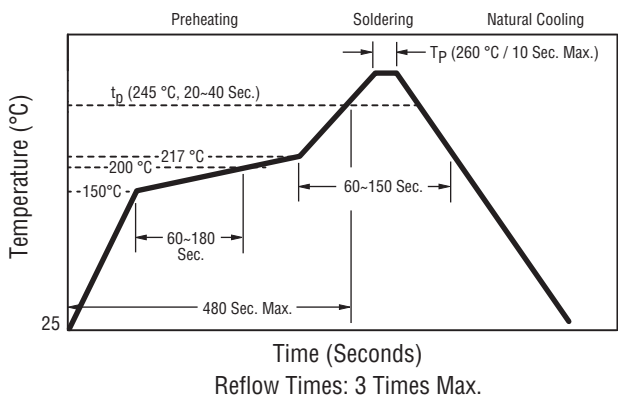
Operating Temperature .....-40 °C to +150 °C  
 (Temperature rise included)  
 Storage Temperature .....-40 °C to +125 °C  
 Rated Current ..... Inductance drops 20 % at I<sub>sat</sub>  
 Temperature Rise .....40 °C at rated I<sub>rms</sub>  
 Moisture Sensitivity Level ..... 1  
 ESD Classification (HBM)..... N/A

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.

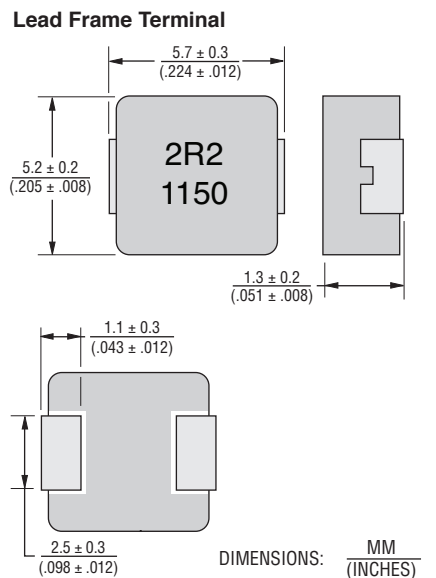
### Materials

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

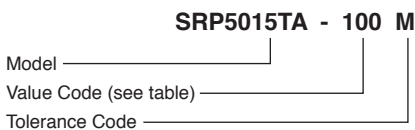
### Soldering Profile



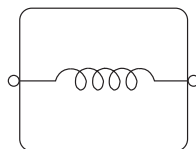
### Product Dimensions



### How to Order

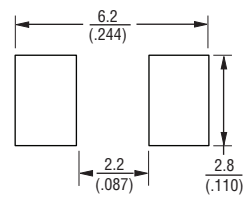


### Schematic



\* 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.  
 The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.  
 Users should verify actual device performance in their specific applications.

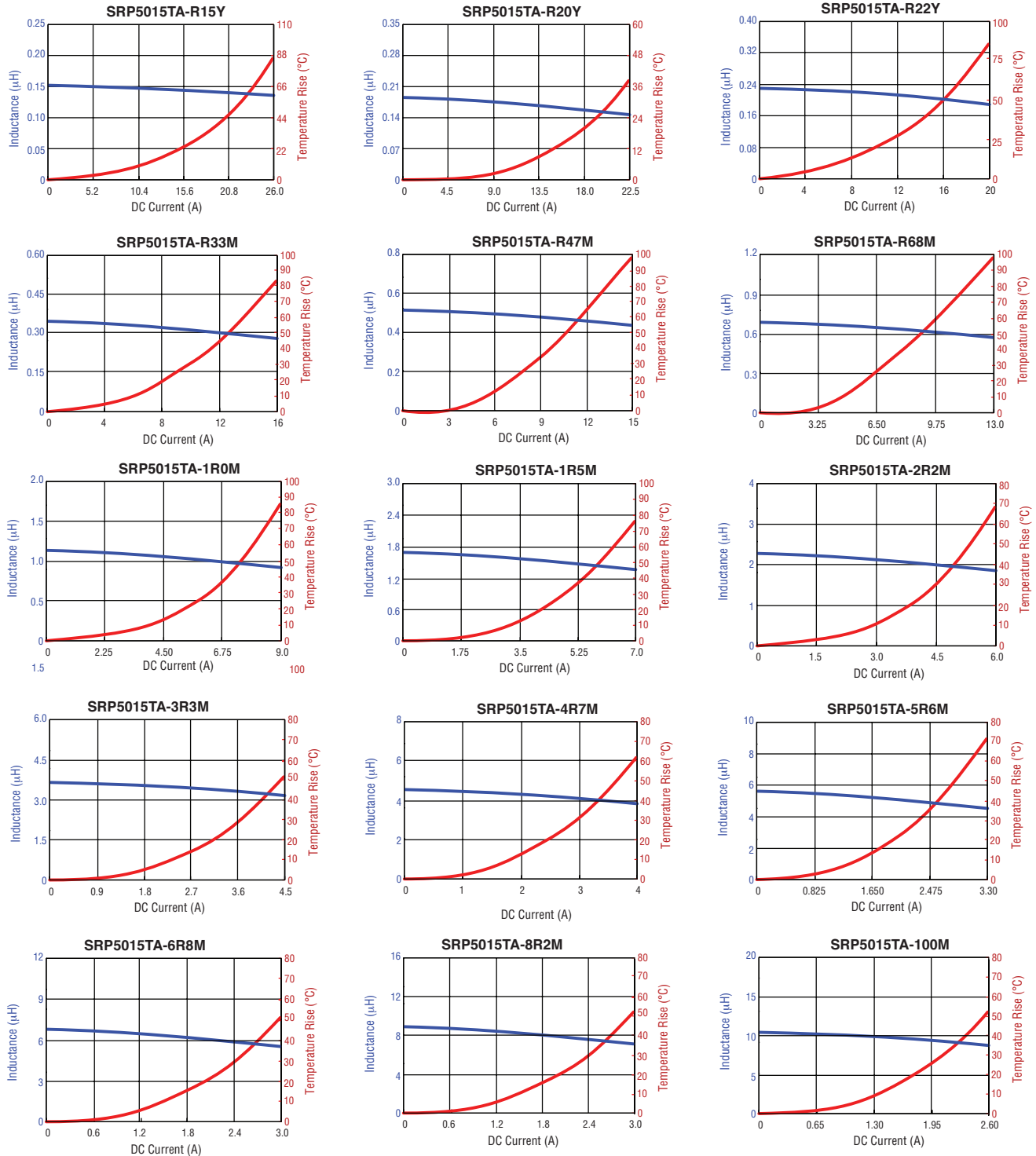
### Recommended Layout



# SRP5015TA Series - Shielded Power Inductors



## L vs. I Charts

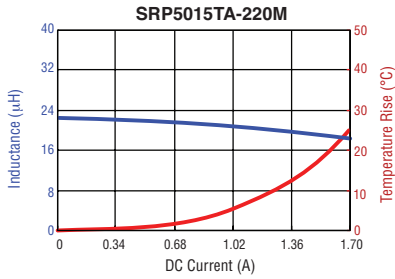


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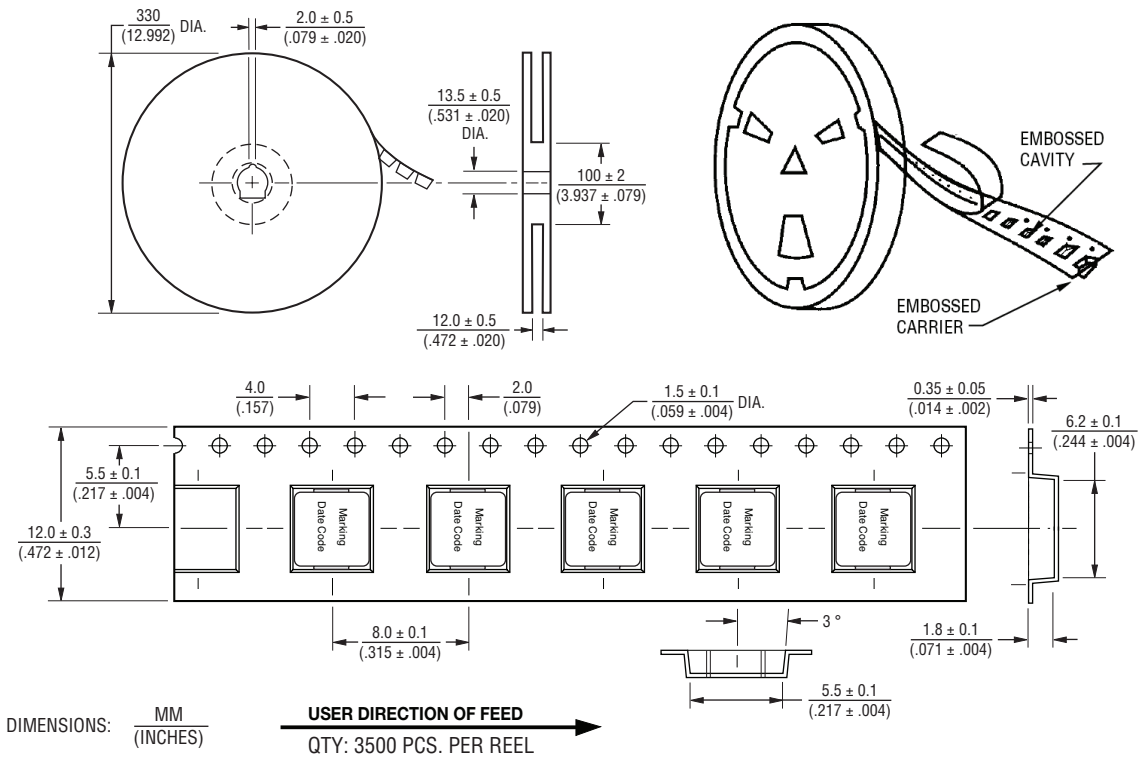
# SRP5015TA Series - Shielded Power Inductors

**BOURNS®**

## L vs. I Charts (Continued)



## Packaging Specifications



REV. 09/17

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