



### Features

- Shielded construction
- Carbonyl powder core
- High saturation current
- Inductance range: 0.15 to 47  $\mu$ H
- AEC-Q200 qualified
- RoHS compliant\* and halogen free\*\*

### Applications

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

## SRP1265A 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)
	L ( $\mu$ H)	Tol. (%)						
SRP1265A-R15M	0.15	20	10	210	0.49	0.6	55	118
SRP1265A-R22M	0.22	20	10	130	0.49	0.6	53	112
SRP1265A-R33M	0.33	20	10	90	0.65	0.8	46	68
SRP1265A-R36M	0.36	20	10	80	0.7	0.9	45	66
SRP1265A-R47M	0.47	20	10	75	0.9	1.2	41	63
SRP1265A-R56M	0.56	20	10	65	1.05	1.2	37	58
SRP1265A-R68M	0.68	20	15	50	1.25	1.5	35	55
SRP1265A-R82M	0.82	20	15	50	1.5	1.9	33	50
SRP1265A-1R0M	1.0	20	20	45	1.7	2.3	30	48
SRP1265A-1R5M	1.5	20	20	30	2.5	3.0	27	45
SRP1265A-2R2M	2.2	20	20	23	3.8	4.2	22	37
SRP1265A-3R3M	3.3	20	20	20	5.7	6.8	18	30
SRP1265A-4R7M	4.7	20	20	17	7	8.4	13.5	28
SRP1265A-5R6M	5.6	20	20	15	8.5	10.0	12.5	23
SRP1265A-6R0M	6.0	20	20	14	8.5	10.0	12.0	23
SRP1265A-6R8M	6.8	20	20	13	9.5	11.5	11.5	18
SRP1265A-8R2M	8.2	20	20	11	12	15.5	10.5	16
SRP1265A-100M	10	20	20	10	13.2	16.5	10	15.5
SRP1265A-150M	15	20	20	7	23.2	28.0	9	12.5
SRP1265A-220M	22	20	20	6	32.5	37.0	9	12
SRP1265A-330M	33	20	20	5	48	58.0	8	11
SRP1265A-470M	47	20	20	4	76	90.0	6.5	9.5

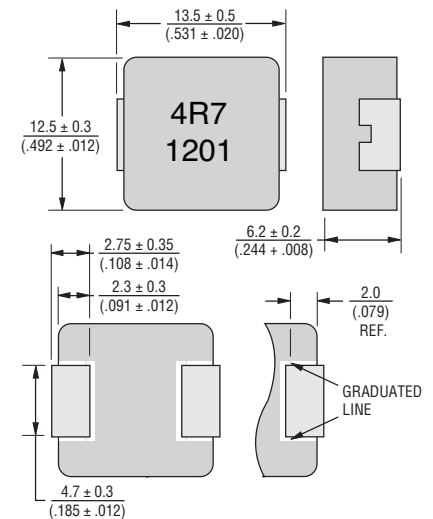
### General Specifications

Test Voltage ..... 1.0 V  
 Test Frequency ..... 100 KHz  
 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>  
 Resistance to Soldering Heat ..... +260 °C, 40 sec. max.

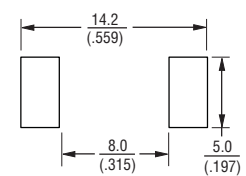
### Materials

Core ..... Carbonyl powder  
 Wire ..... Enameled copper  
 Terminal Finish ..... Sn  
 Packaging ..... 500 pcs. per 13-inch reel

### Product Dimensions



### Recommended Layout



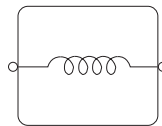
DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

### How to Order

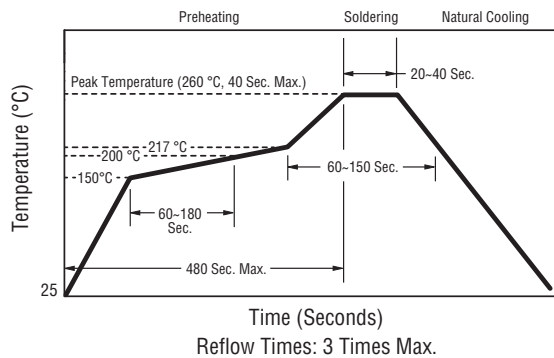
SRP1265A - 100M

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

### Electrical Schematic



### Soldering Profile



Peak Temperature: 260 °C max.  
 Max. Peak Temperature 260 °C: 40 sec. max.  
 Max. Time Above 217 °C: 60-150 sec. max.

Reflow Times: 3 Times Max.

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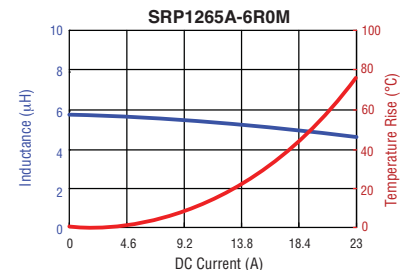
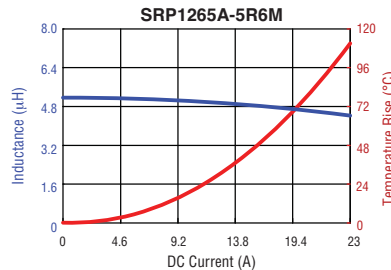
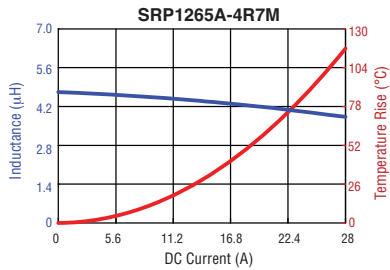
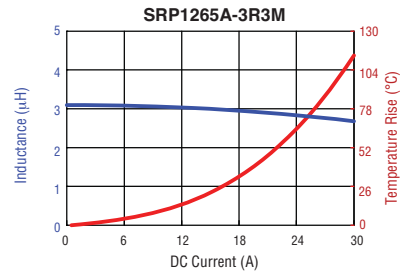
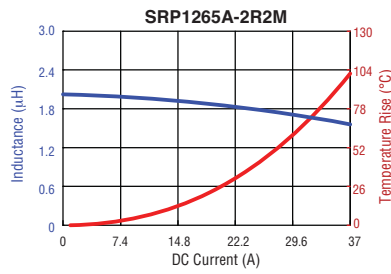
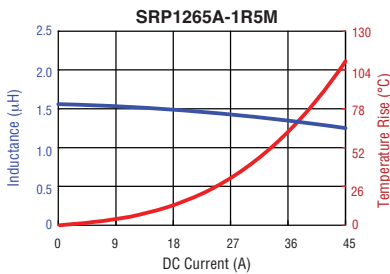
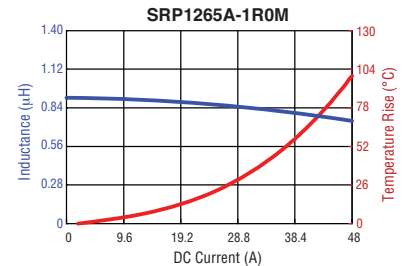
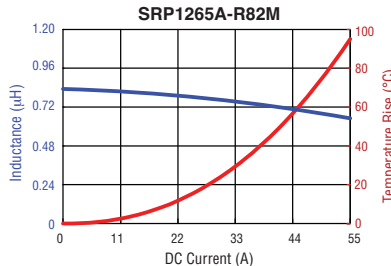
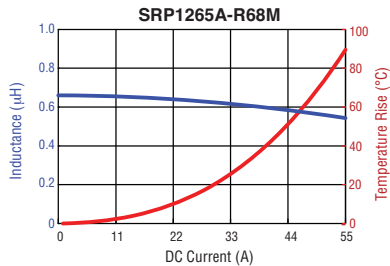
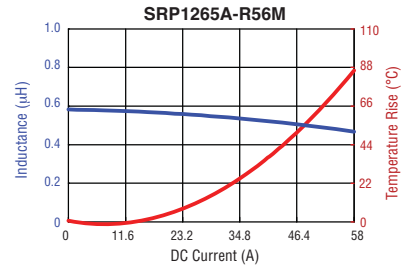
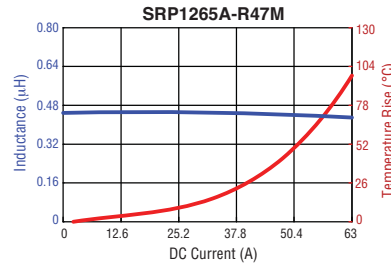
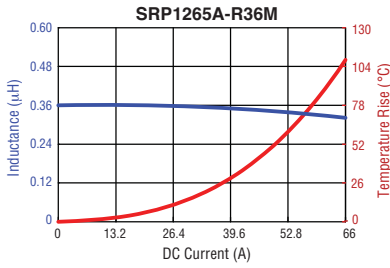
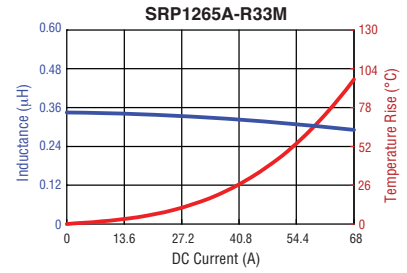
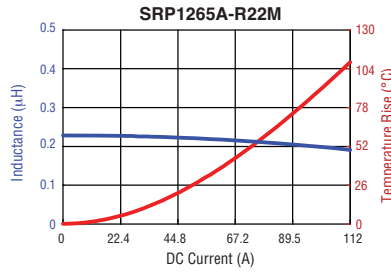
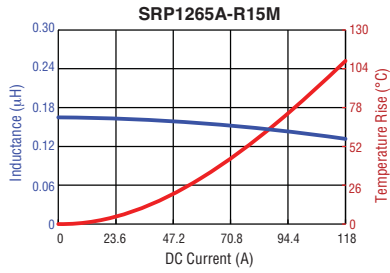
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.

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# SRP1265A Series - Shielded Power Inductors



## L vs. I Charts

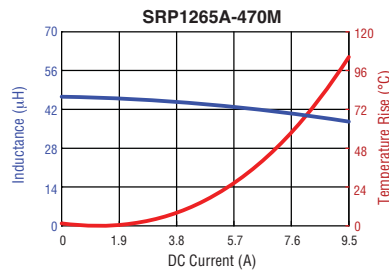
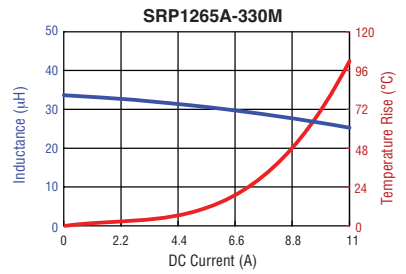
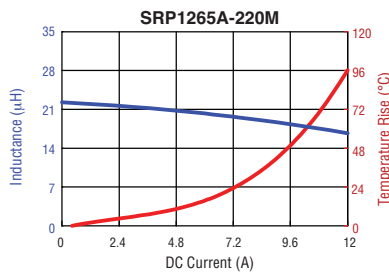
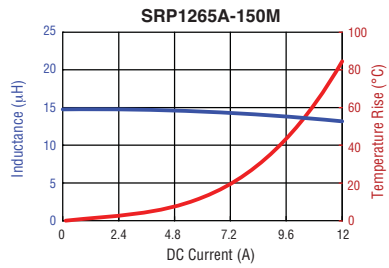
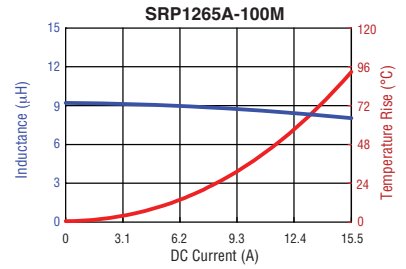
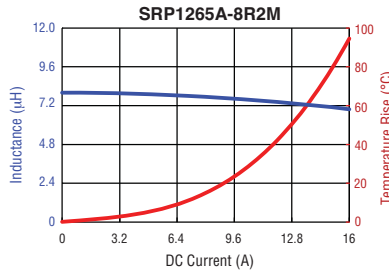
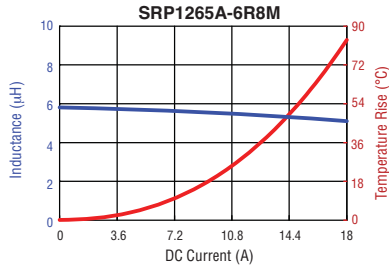


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# SRP1265A Series - Shielded Power Inductors



## L vs. I Charts (Continued)

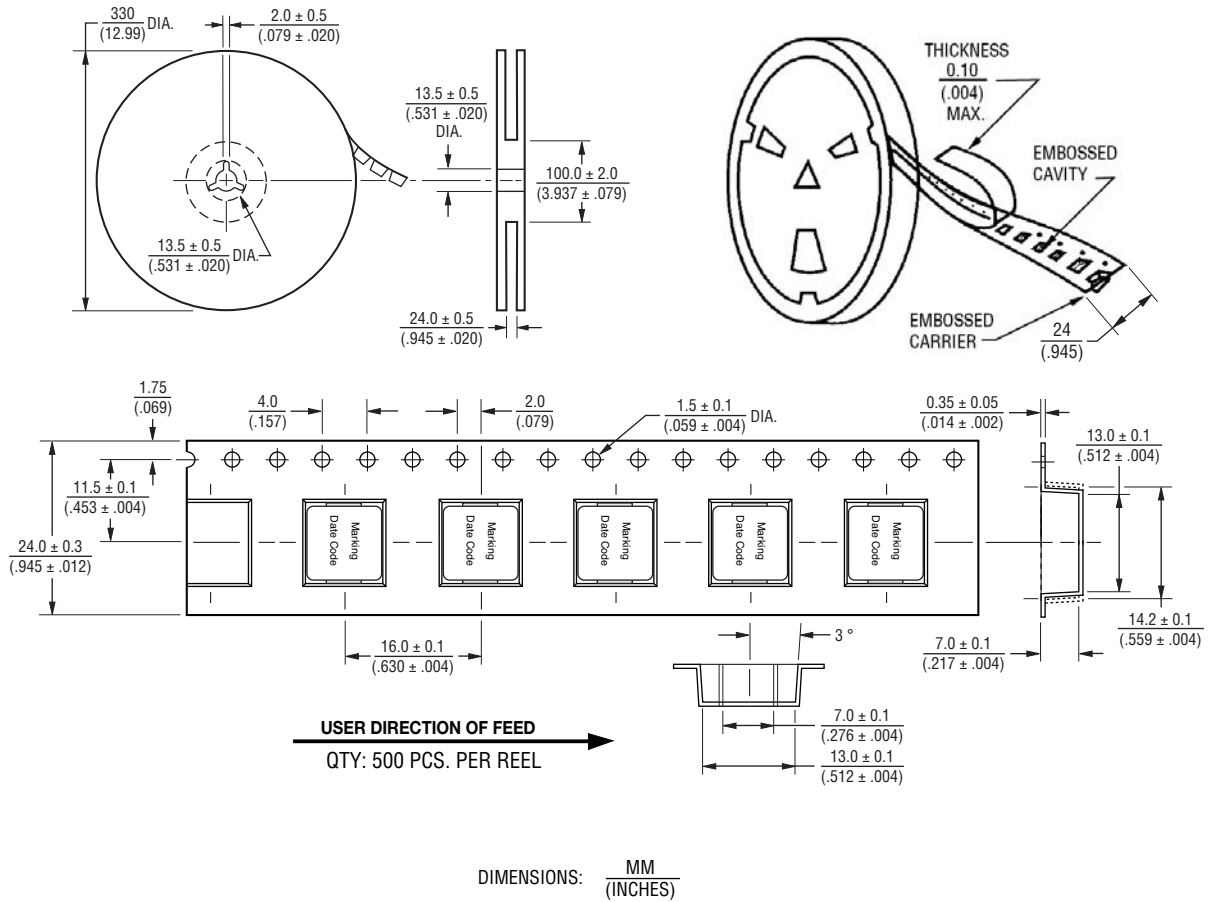


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# SRP1265A Series - Shielded Power Inductors

# BOURNS®

## Packaging Specifications



# BOURNS®

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REV. 03/15

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