



## 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)	Isat (A)	Terminal Type
	L ( $\mu$ H)	Tol. (%)							
SRP1265A-R15M	0.15	20	10	210	0.49	0.6	55	118	Non-Lead Frame
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-1R8M	1.8	20	20	30	3.6	4.0	24	40	
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 Isat  
 Temperature Rise ..... 40 °C at rated I<sub>rms</sub>  
 Resistance to Soldering Heat ..... +260 °C, 40 sec. max.

### Materials

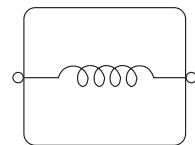
Core ..... Carbonyl powder  
 Wire ..... Enameled copper  
 Terminal Finish ..... Sn  
 Packaging ..... 500 pcs. per 13-inch reel

### How to Order

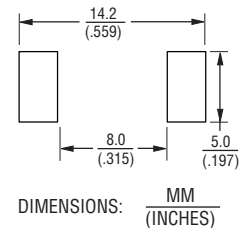
**SRP1265A - 100M**

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

### Electrical Schematic

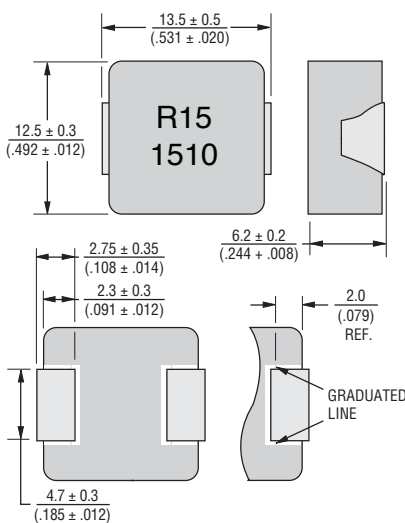


### Recommended Layout

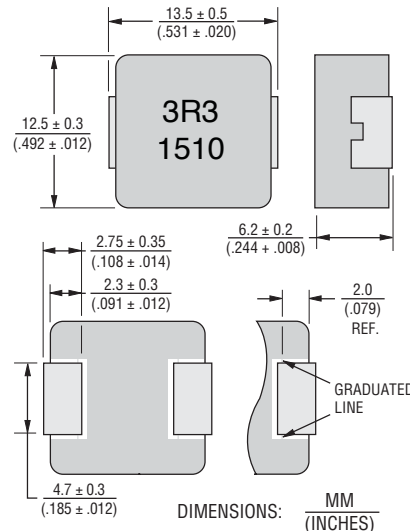


### Product Dimensions

#### Non-Lead Frame Terminal



#### Lead Frame Terminal



\* 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.

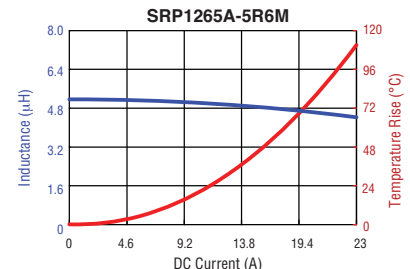
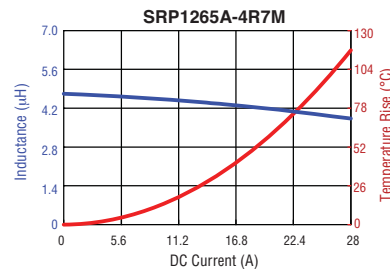
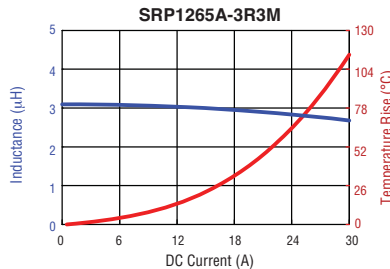
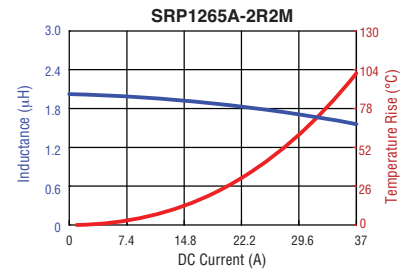
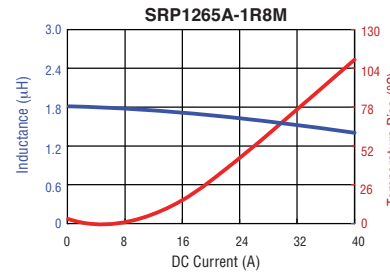
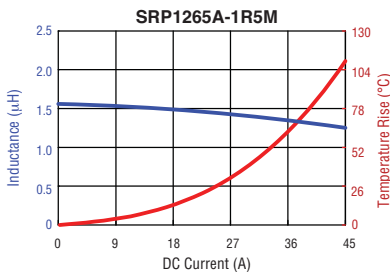
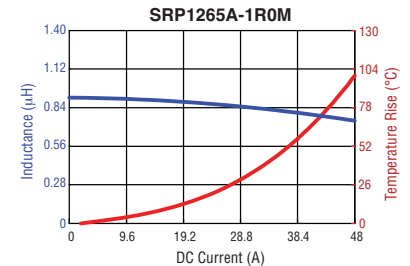
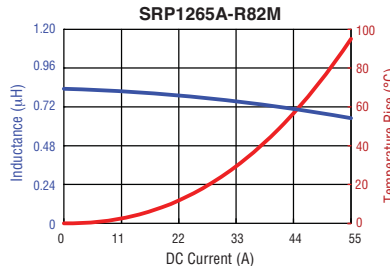
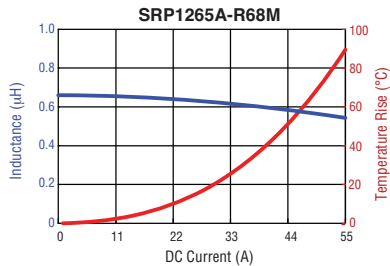
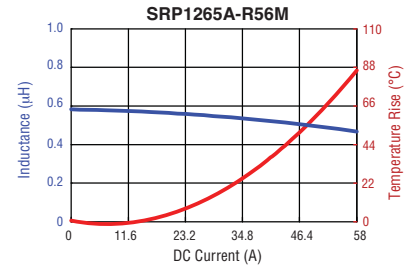
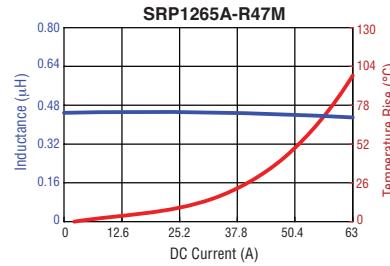
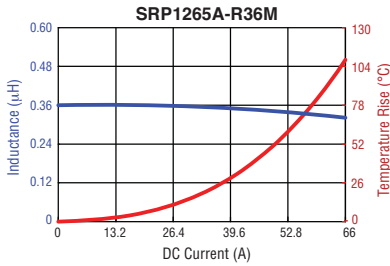
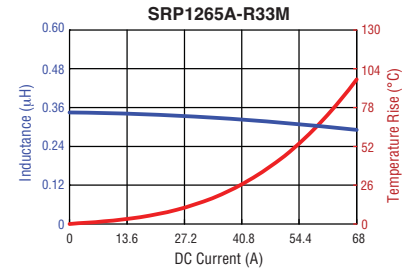
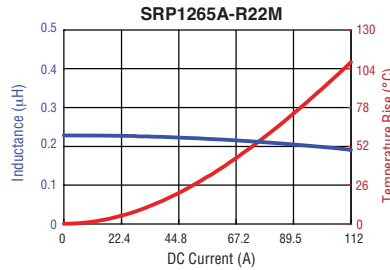
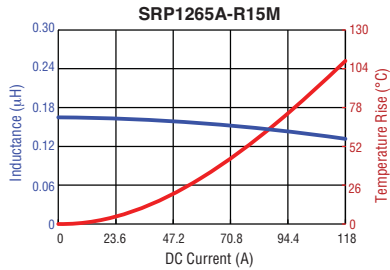
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.

Users should verify actual device performance in their specific applications.

# SRP1265A Series - Shielded Power Inductors



## L vs. I Charts

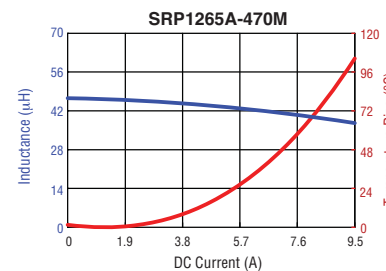
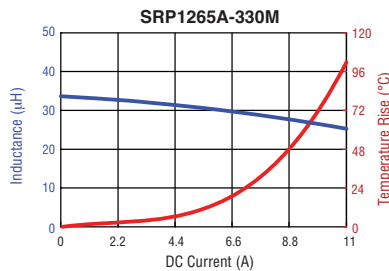
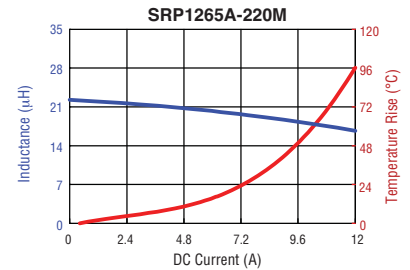
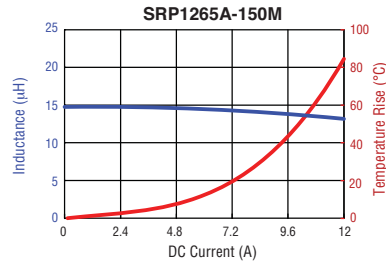
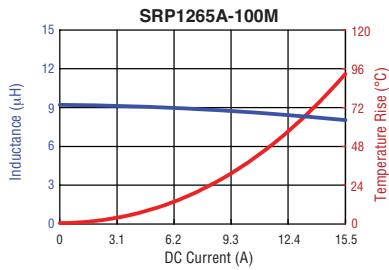
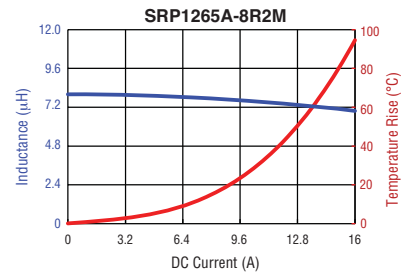
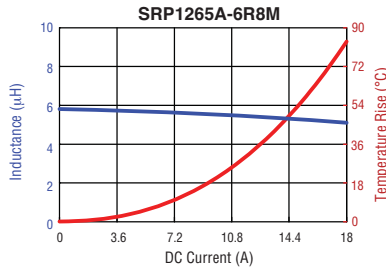
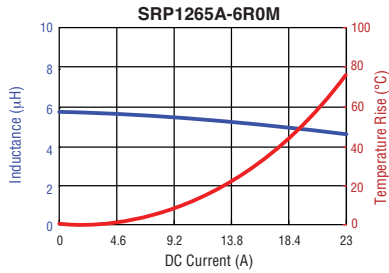


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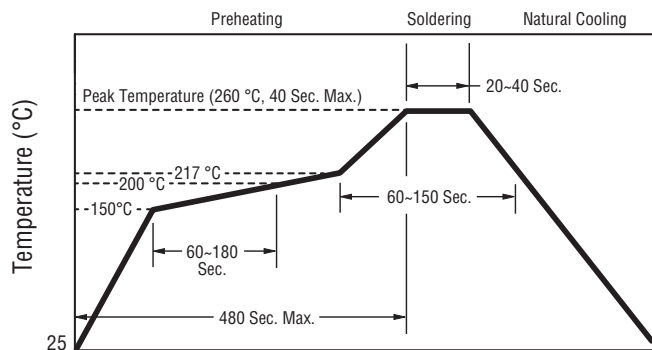
# SRP1265A Series - Shielded Power Inductors



## L vs. I Charts (Continued)



## Soldering Profile



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

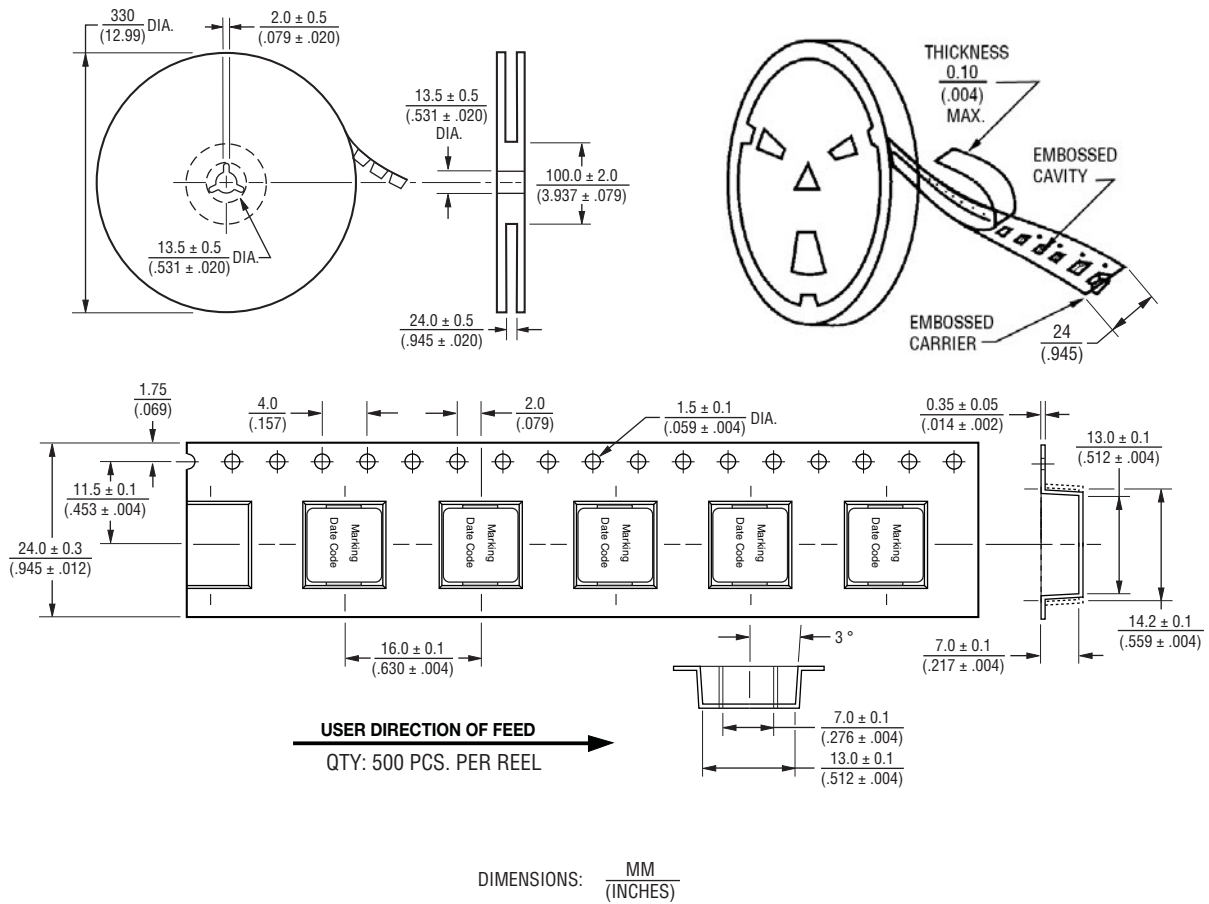
Time (Seconds)  
Reflow Times: 3 Times Max.

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## Packaging Specifications



REV. 09/16

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