



Features

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

Applications

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

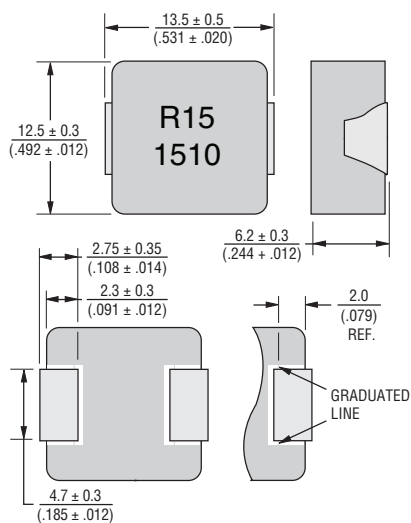
SRP1265A Series - Shielded Power Inductors

Electrical Specifications @ 25 °C

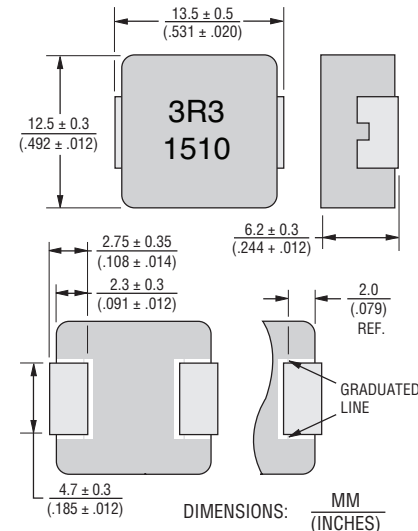
Bourns Part Number	Inductance @ 100 KHz / 1 V		Q (Min.) @ 100 KHz / 1 V	SRF (MHz) Typ.	DCR (m Ω) Typ.	DCR (m Ω) Max.	I _{rms} (A)	Isat (A)	Terminal Type
	L (μ H)	Tol. (%)							
SRP1265A-R15M	0.15	20	10	210	0.49	0.6	55	118	Non- Lead Frame
SRP1265A-R22M	0.22	20	10	130	0.49	0.6	53	112	
SRP1265A-R33M	0.33	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	Lead Frame
SRP1265A-2R2M	2.2	20	20	23	3.8	4.2	22	40	
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	

Product Dimensions

Non-Lead Frame Terminal



Lead Frame Terminal



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_{rms}
 Resistance to Soldering Heat
 +260 °C, 40 sec. max.
 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

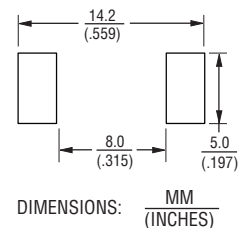
Core Carbonyl powder
 Wire Enameled copper
 Terminal Finish Sn
 Packaging 500 pcs. per 13-inch reel

How to Order

SRP1265A - 100M

Model
 Value Code (see table)

Recommended Layout



Please consult *Bourns® Model SRP-A Series Visual Inspection Guide* for detailed construction, processing and testing information.

* 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.

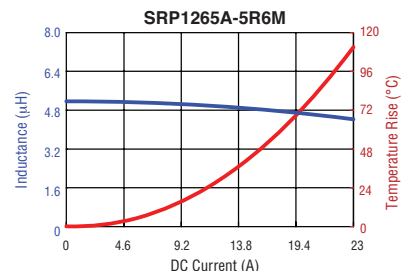
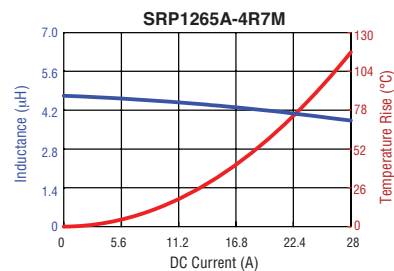
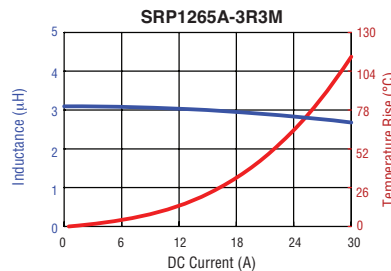
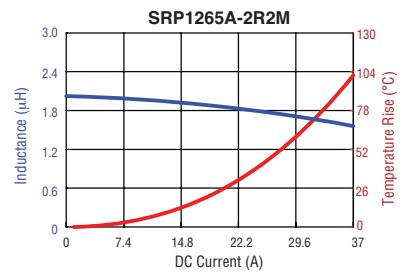
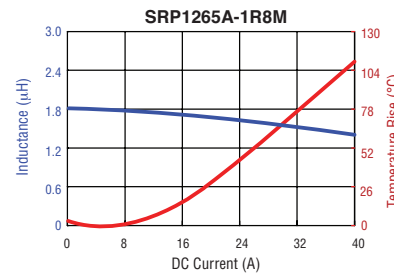
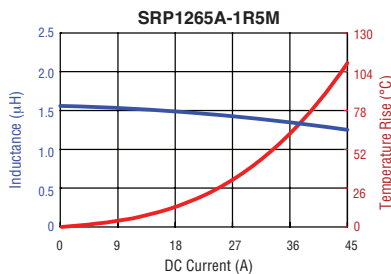
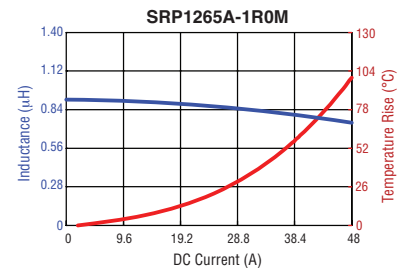
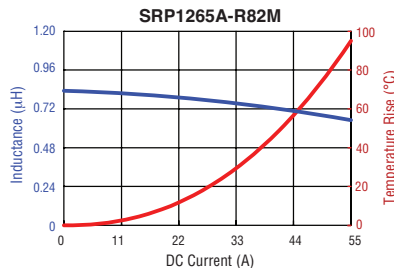
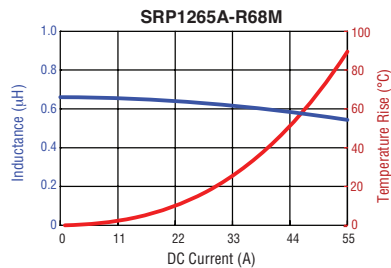
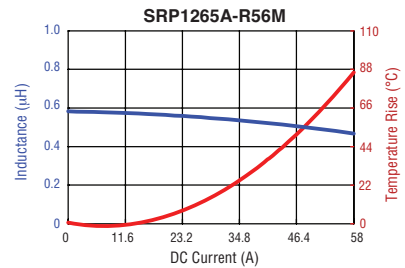
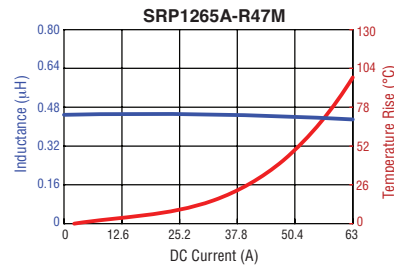
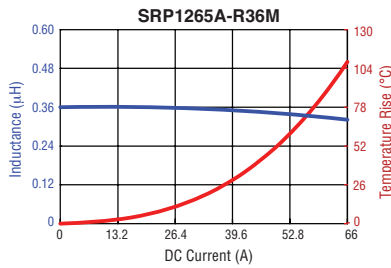
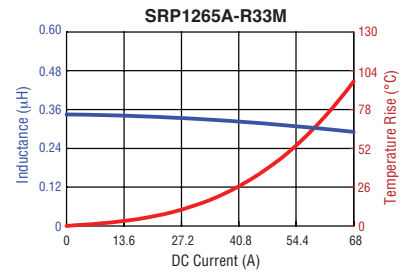
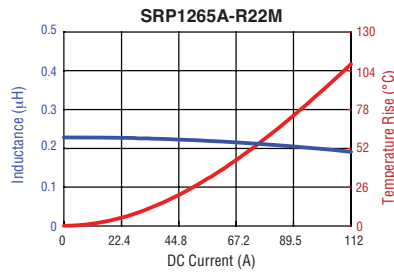
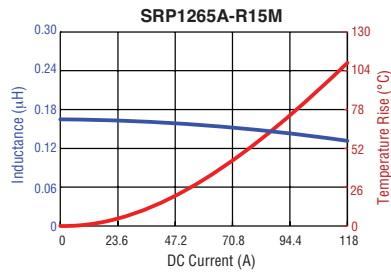
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.

Users should verify actual device performance in their specific applications.

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L vs. I Charts

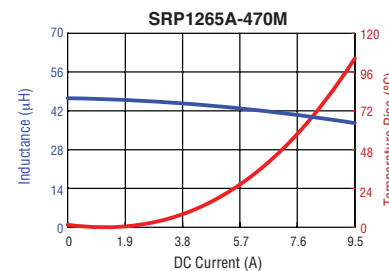
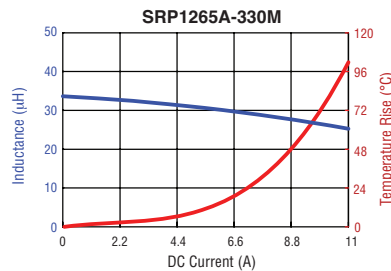
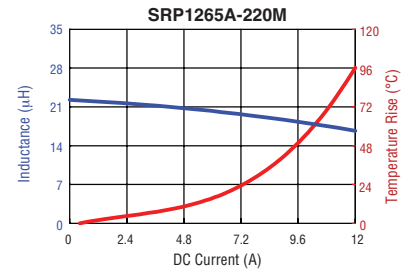
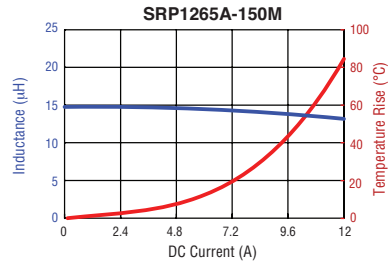
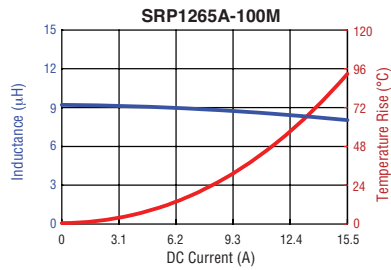
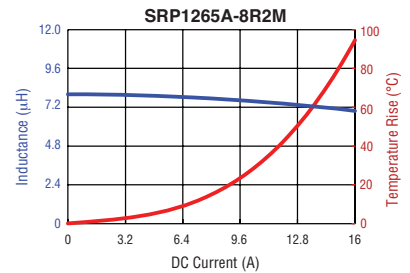
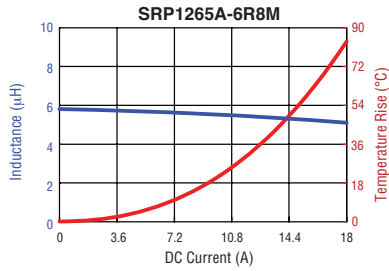
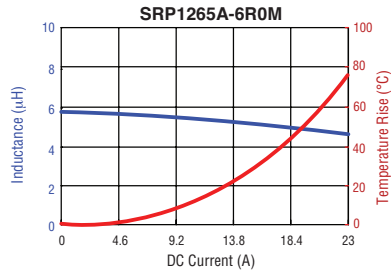


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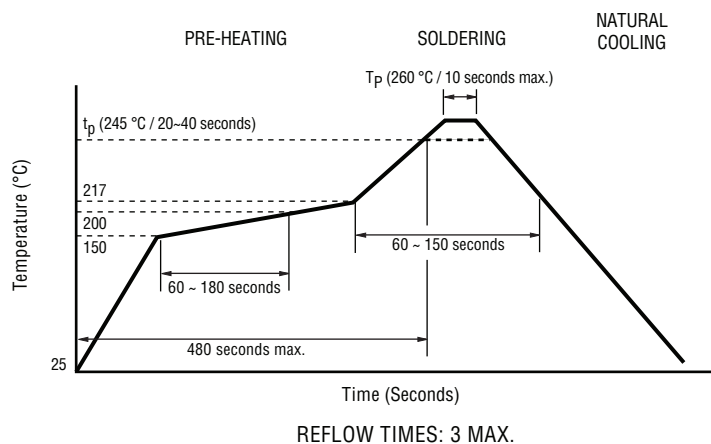
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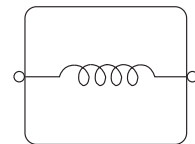
L vs. I Charts (Continued)



Soldering Profile



Electrical Schematic



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Technical drawing of a 13mm diameter reel of 13mm x 24mm x 0.1mm thick embossed carriers. The drawing includes a top view, a side view, and a detail view of the carrier.

Top View Dimensions:

- Reel Diameter: 330 (12.99) DIA.
- Carrier Diameter: 13.5 ± 0.5 (.531 ± .020) DIA.
- Carrier Thickness: 2.0 ± 0.5 (.079 ± .020)
- Carrier Width: 100.0 ± 2.0 (3.937 ± .079)
- Carrier Spacing: 24.0 ± 0.5 (.945 ± .020)
- Carrier Length: 24 (.945)

Side View Dimensions:

- Carrier Thickness: 0.10 (.004) MAX.
- Embossed Cavity
- Embossed Carrier

Detail View Dimensions:

- Carrier Width: 13.0 ± 0.1 (.512 ± .004)
- Carrier Length: 14.2 ± 0.1 (.559 ± .004)
- Carrier Thickness: 0.35 ± 0.05 (.014 ± .002)
- Carrier Spacing: 16.0 ± 0.1 (.630 ± .004)
- Carrier Width: 7.0 ± 0.1 (.276 ± .004)
- Carrier Length: 13.0 ± 0.1 (.512 ± .004)
- Carrier Thickness: 1.75 (.069)
- Carrier Spacing: 4.0 (.157)
- Carrier Width: 2.0 (.079)
- Carrier Thickness: 1.5 ± 0.1 (.059 ± .004) DIA.
- Carrier Spacing: 0.35 ± 0.05 (.014 ± .002)
- Carrier Width: 11.5 ± 0.1 (.453 ± .004)
- Carrier Length: 24.0 ± 0.3 (.945 ± .012)
- Carrier Thickness: 1.75 (.069)
- Carrier Spacing: 4.0 (.157)
- Carrier Width: 2.0 (.079)
- Carrier Thickness: 1.5 ± 0.1 (.059 ± .004) DIA.
- Carrier Spacing: 0.35 ± 0.05 (.014 ± .002)
- Carrier Width: 11.5 ± 0.1 (.453 ± .004)
- Carrier Length: 24.0 ± 0.3 (.945 ± .012)

USER DIRECTION OF FEED

QTY: 500 PCS. PER REEL

DIMENSIONS: MM (INCHES)

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