

### **Features**

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

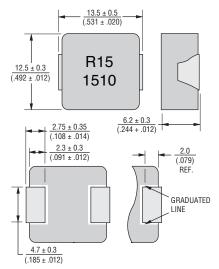
# SRP1265A Series - Shielded Power Inductors

### Electrical Specifications @ 25 °C

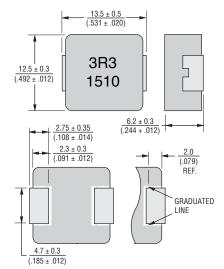
Bourns Port Number	Inductance @ 100 KHz /1 V		Q (Min.) @100 KHz	SRF (MHz)	DCR (mΩ)	DCR (mΩ)	Irms	Isat	Terminal
Part Number	L (μΗ)	Tol. (%)	/1 V	`Typ.´	Тур.	Max.	(A)	(A)	Туре
SRP1265A-R15M	0.15	20	10	210	0.49	0.6	55	118	Non- Lead Frame
SRP1265A-R22M	0.22	20	10	130	0.49	0.6	53	112	
SRP1265A-R33M	0.33	20	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	30	50	1.3	1.5	35	55	Lead Frame
SRP1265A-R82M	0.82	20	30	43	1.6	1.9	33	50	
SRP1265A-1R0M	1.0	20	30	34	2.0	2.3	30	48	
SRP1265A-1R5M	1.5	20	30	30	2.7	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	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**

rest voltage					
Test Frequency100 KHz					
Operating Temperature					
55 °C to +150 °C					
(Temperature rise included)					
Storage Temperature					

101/

.....-55 °C to +150 °C

Rated Current

Toet Voltage

<sup>1</sup> 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.

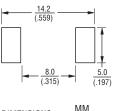
# Materials

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

### How to Order



# **Recommended Layout**



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

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

Users should verify actual device performance in their specific applications.

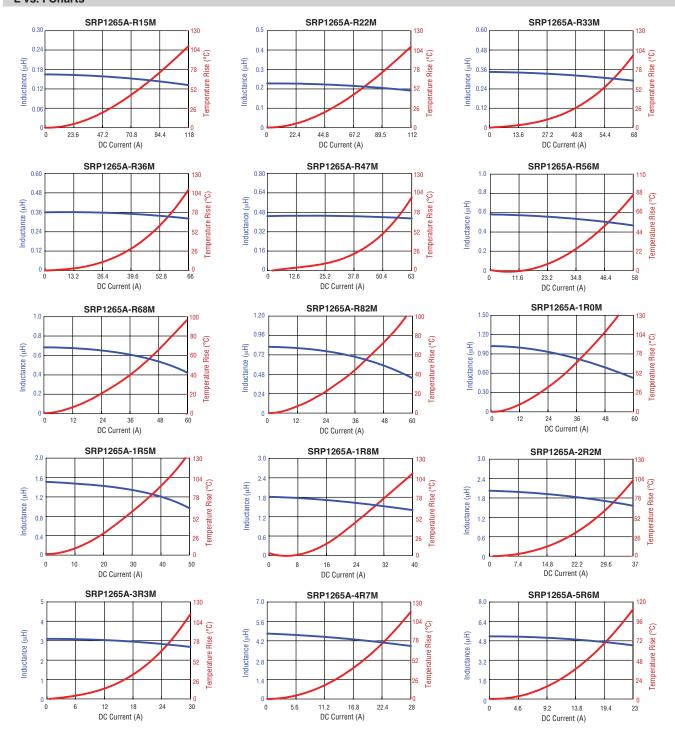
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<sup>\*</sup> RoHS Directive 2015/863, Mar 31, 2015 and Annex.

<sup>\*\*</sup>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.

# BOURNS

# L vs. I Charts



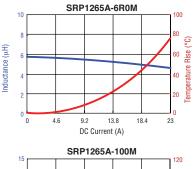
Specifications are subject to change without notice.

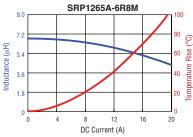
Users should verify actual device performance in their specific applications.

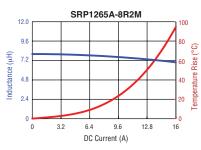
# **SRP1265A Series - Shielded Power Inductors**

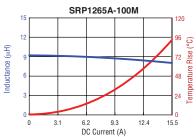
# BOURNS

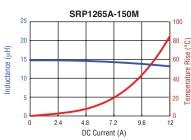
# L vs. I Charts (Continued)

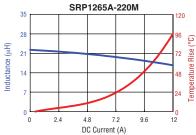


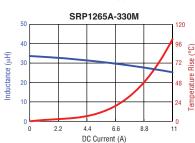


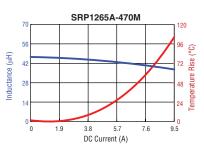


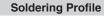








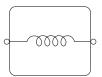




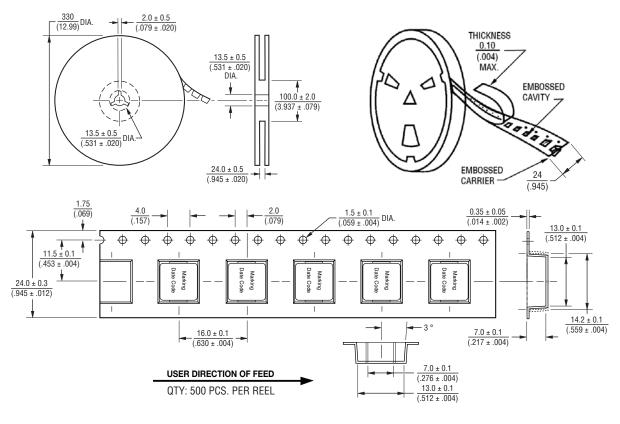
# PRE-HEATING SOLDERING COOLING Tp (260 °C / 10 seconds max.) tp (245 °C / 20~40 seconds) 217 200 150 480 seconds max. Time (Seconds)

REFLOW TIMES: 3 MAX.

# **Electrical Schematic**



## **Packaging Specifications**



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

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 SRP1265A-1R0M
 SRP1265A-2R2M
 SRP1265A-220M
 SRP1265A-R33M
 SRP1265A-3R3M

 SRP1265A-R82M
 SRP1265A-R36M
 SRP1265A-5R6M
 SRP1265A-100M
 SRP1265A-1R5M
 SRP1265A-330M

 SRP1265A-4R7M
 SRP1265A-R56M
 SRP1265A-6R8M
 SRP1265A-R22M
 SRP1265A-R47M
 SRP1265A-R15M

 SRP1265A-R68M
 SRP1265A-150M
 SRP1265A-470M
 SRP1265A-6R0M
 SRP1265A-1R8M