



Features

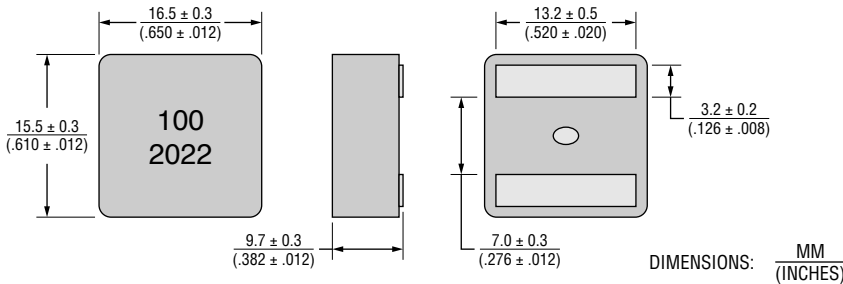
- Shielded construction
- Metal alloy powder core
- High saturation current
- Low buzz noise
- Flat wire
- AEC-Q200 compliant
- RoHS compliant* and halogen free**

SRP1510CA Series - Shielded Power Inductors

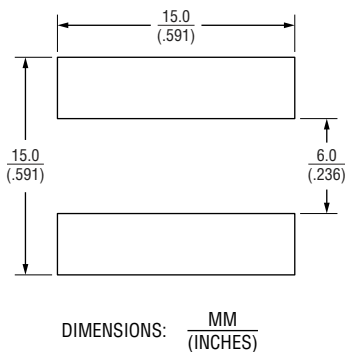
Electrical Specifications @ 25 °C

Bourns Part Number	Inductance @ 100 KHz / 0.1 V		Q Typ. @ 100 kHz / 0.1 V	SRF (MHz) Typ.	DCR (mΩ) Typ.	DCR (mΩ) Max.	I _{rms} (A) Typ.		Isat (A) Typ.
	L (μH)	Tol. (%)					20 °C Temp. Rise	40 °C Temp. Rise	
SRP1510CA-4R7M	4.7	20	30	13	3.4	3.8	22	30	43
SRP1510CA-5R6M	5.6	20	30	11	3.82	4.2	21	28	38
SRP1510CA-6R8M	6.8	20	30	10	4.18	4.6	20	26	36
SRP1510CA-8R2M	8.2	20	30	9	6.0	7.2	19	25	32
SRP1510CA-100M	10	20	30	8	7.1	8.6	18	24	29
SRP1510CA-150M	15	20	30	6	9.2	11.5	14	18	23
SRP1510CA-220M	22	20	30	5	13.2	15.8	11	16	20
SRP1510CA-330M	33	20	30	4	18.7	20	9	13	18.7

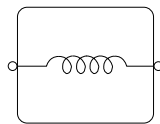
Product Dimensions



Recommended Layout



Electrical Schematic



How to Order

SRP1510CA - 1R0M

Model _____
Value Code (see table) _____

Additional Information

Click these links for more information:



General Specifications

Operating Temperature
.....-55 °C to +155 °C
(Temperature rise included)
Storage Temperature (Component)
.....-55 °C to +155 °C
Rated Current
..... Inductance drops 30 % at Isat
Temperature Rise
..... 20 or 40 °C at rated I_{rms}¹
Rated Voltage40 V Typ.
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..... Metal alloy powder
Wire Enameled copper
Terminal Finish Sn
Packaging 150 pcs. per 13-inch reel

Please consult [Bourns® Model SRP-A Series Visual Inspection Guide](#) for detailed construction, processing and testing information.

* RoHS Directive 2015/863, Mar 31, 2015 and Annex.

** 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.

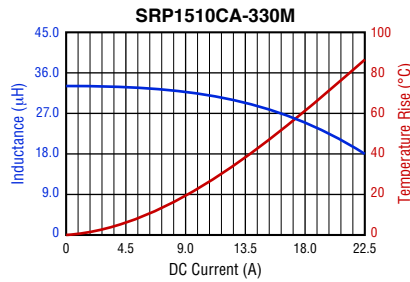
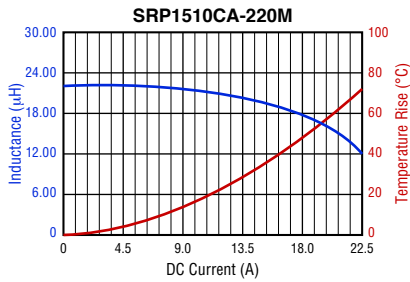
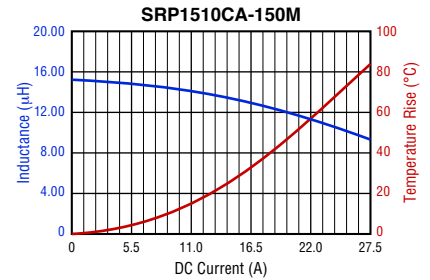
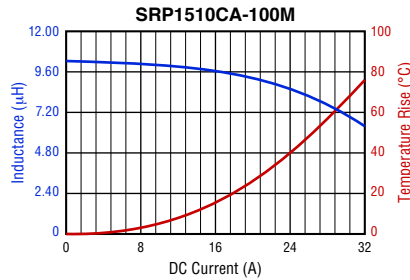
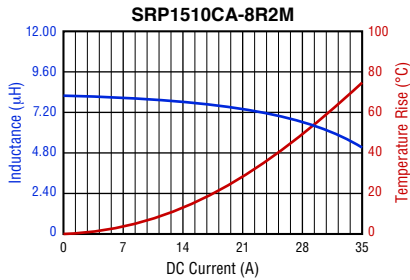
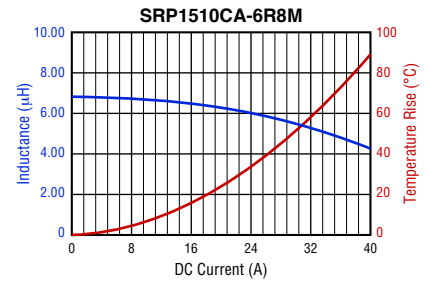
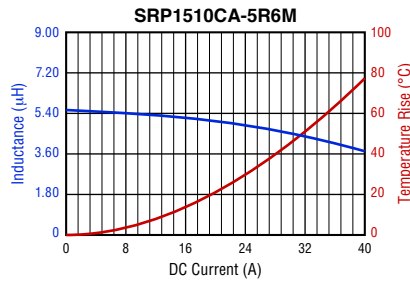
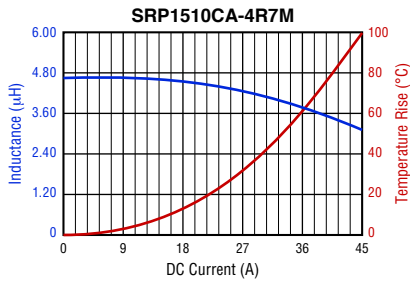
Users should verify actual device performance in their specific applications.

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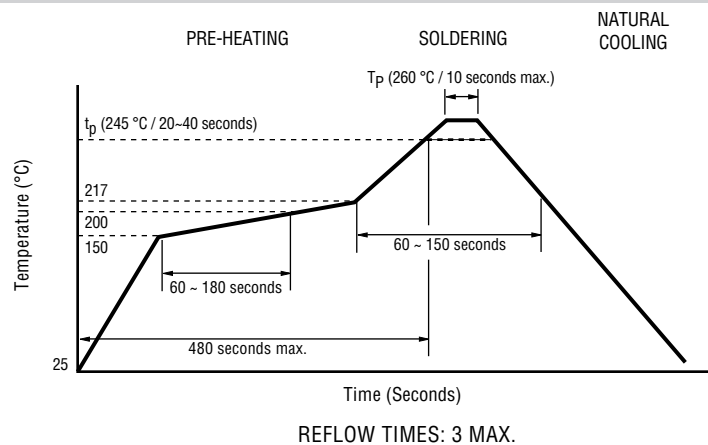
SRP1510CA Series - Shielded Power Inductors



L vs. I Charts



Soldering Profile



REFLOW TIMES: 3 MAX.

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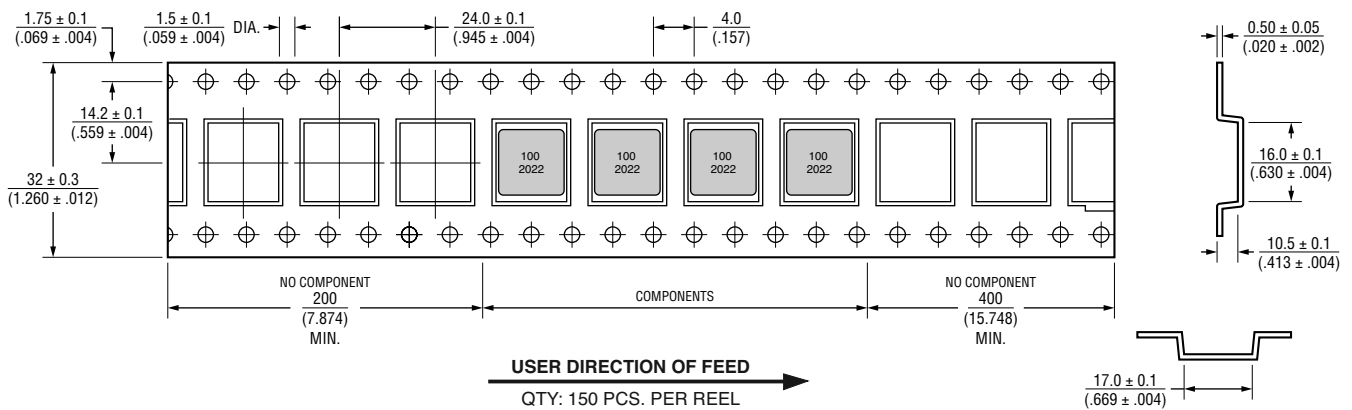
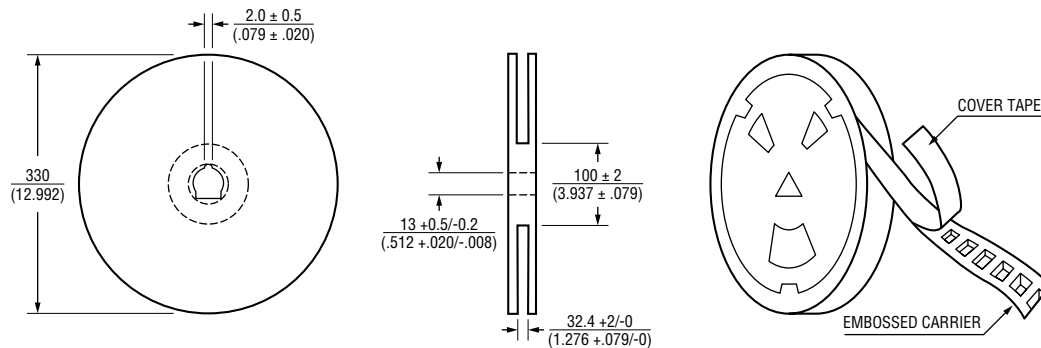
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SRP1510CA Series - Shielded Power Inductors

BOURNS®

Packaging Specifications



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

BOURNS®

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