

#### **Features**

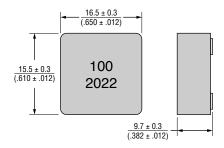
- Shielded construction
- Metal alloy powder core
- High saturation current
- Low buzz noise
- Flat wire
- AEC-Q200 compliant
- RoHS compliant\* and halogen free\*\*

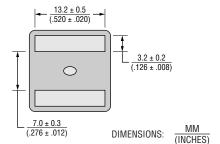
# SRP1510CA Series - Shielded Power Inductors

#### Electrical Specifications @ 25 °C

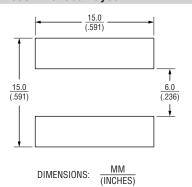
Bourns Part Number	Inductance @ 100 KHz / 0.1 V		Q Typ. @	SRF (MHz)	DCR (mΩ)	DCR (mΩ)	Irms (A) Typ.		Isat (A)
	L (μH)	Tol. (%)	100 kHz / 0.1 V	`Typ.´	Тур.	Max.	20 °C Temp. Rise	40 °C Temp. Rise	Тур.
SRP1510CA-4R7M	4.7	20	30	13	3.4	3.8	22	30	43
SRP1510CA-5R6M	5.6	20	30	11	3.82	4.2	21	28	38
SRP1510CA-6R8M	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

#### **Additional Information**

Click these links for more information:









**PRODUCT** 

TECHNICA LIBBARY

<u>INVENTORY</u>

**SAMPLES** 

### **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

Rated Voltage ......40 V Typ.
Moisture Sensitivity Level ......1
ESD Classification (HBM).....N/A

<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......Metal alloy powder
Wire .....Enameled copper
Terminal Finish .....Sn
Packaging ......150 pcs. per 13-inch reel

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

Specifications are subject to change without notice.

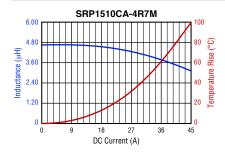
Users should verify actual device performance in their specific applications.

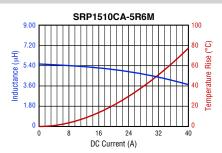
<sup>\*</sup> RoHS Directive 2015/863, Mar 31, 2015 and Annex.

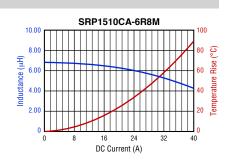
<sup>\*\*</sup>Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

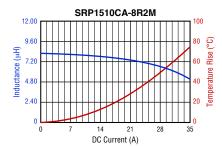
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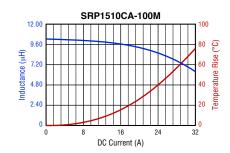


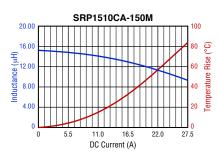


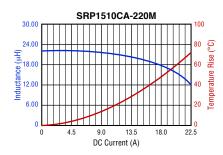


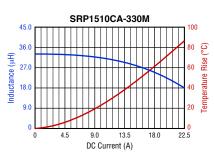




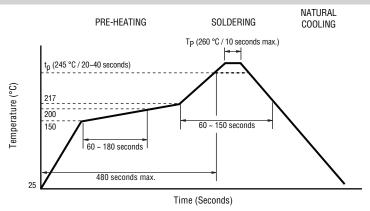








### **Soldering Profile**

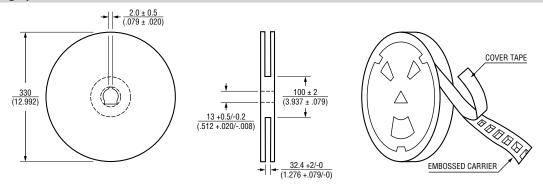


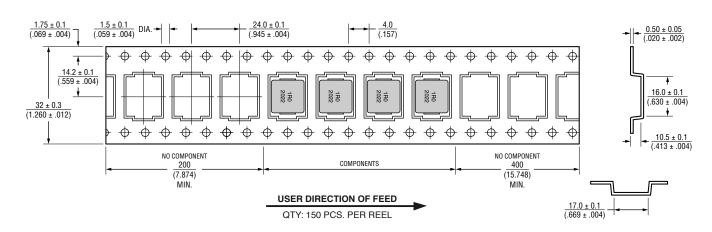
REFLOW TIMES: 3 MAX.

# **SRP1510CA Series - Shielded Power Inductors**

### BOURNS

#### **Packaging Specifications**





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