



### Features

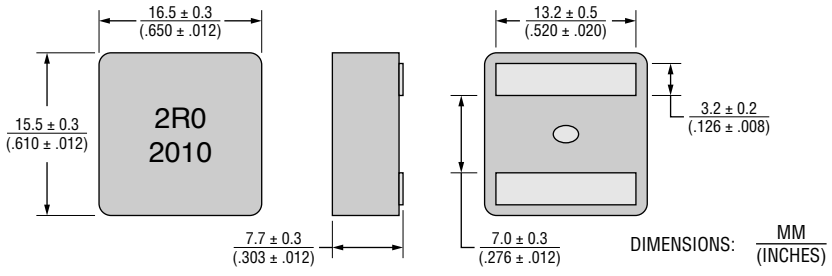
- Shielded construction
- Metal alloy powder core
- High saturation current
- Low buzz noise
- Flat wire
- AEC-Q200 compliant
- RoHS compliant\* and halogen free\*\*

## SRP1580CA Series - Shielded Power Inductors

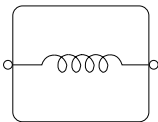
### Electrical Specifications @ 25 °C

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.	Irms (A) Typ.		Isat (A) Typ.
	L (μH)	Tol. (%)					20 °C Temp. Rise	40 °C Temp. Rise	
SRP1580CA-1R0M	1.0	20	30	28	1.0	1.15	41	58	80
SRP1580CA-2R0M	2.0	20	30	18	1.92	2.21	29.5	40	57
SRP1580CA-5R3M	5.3	20	30	12	4.45	5.34	19.5	26	35

### Product Dimensions



### Electrical Schematic

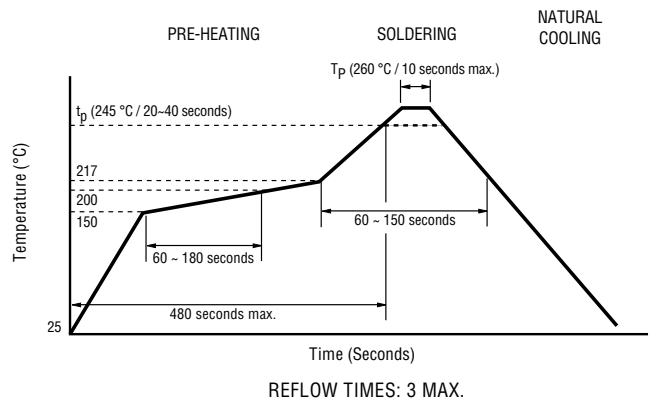


### How to Order

**SRP1580CA - 1R0M**

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

### Soldering Profile



### Additional Information

Click these links for more information:







[PRODUCT](#)
[TECHNICAL LIBRARY](#)
[INVENTORY](#)
[SAMPLES](#)
[CONTACT](#)

### 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 Irms<sup>1</sup>
- Rated Voltage .....40 V Typ.
- Moisture Sensitivity Level ..... 1
- ESD Classification (HBM)..... N/A

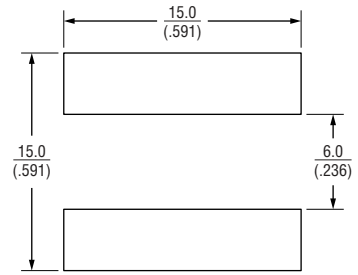
<sup>1</sup> Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

### Materials

- Core..... Metal alloy powder
- Wire .....Enameled copper
- Terminal Finish .....Sn
- Packaging..... 200 pcs. per 13-inch reel

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

### Recommended Layout

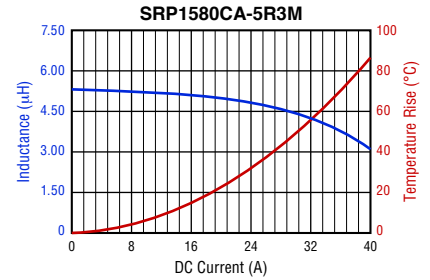
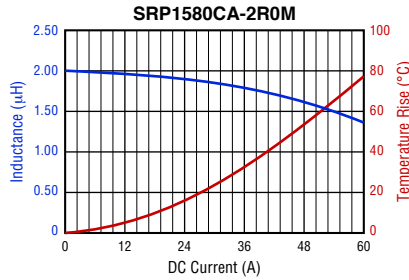
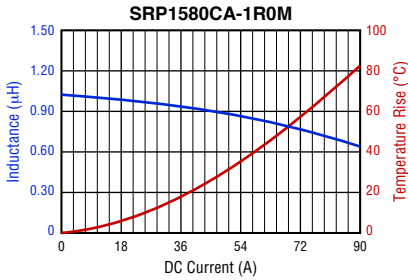


\* RoHS Directive 2015/863, Mar 31, 2015 and Annex.  
 \*\* Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.  
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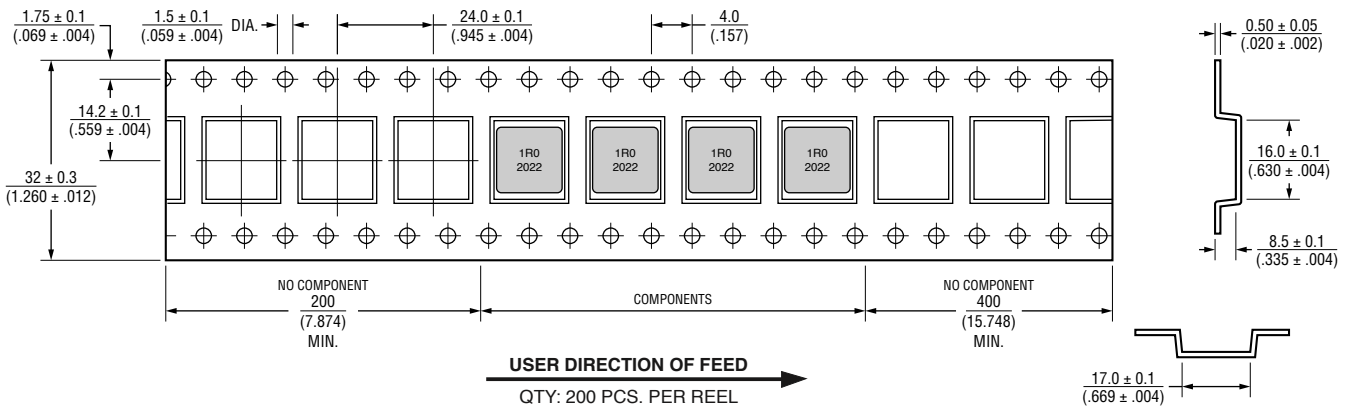
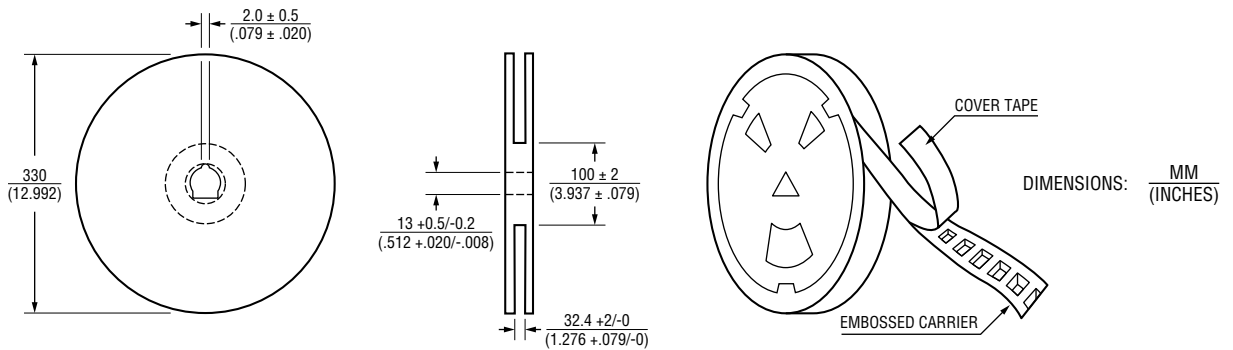
# SRP1580CA Series - Shielded Power Inductors



## L vs. I Charts



## Packaging Specifications



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