



Features

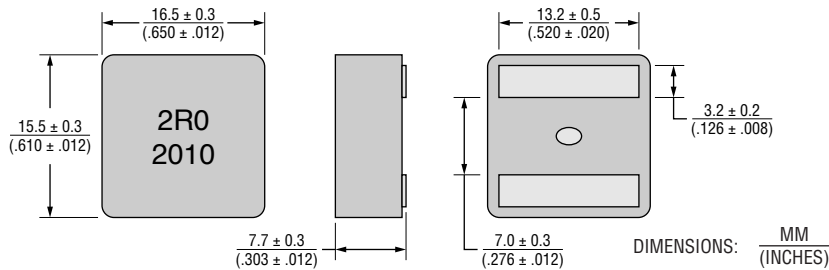
- Shielded construction
- Metal alloy powder core
- High saturation current
- Low buzz noise
- Flat wire
- AEC-Q200 compliant
- RoHS compliant* and halogen free**

SRP1580CA Series - Shielded Power Inductors

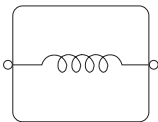
Electrical Specifications @ 25 °C

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.	I _{rms} (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

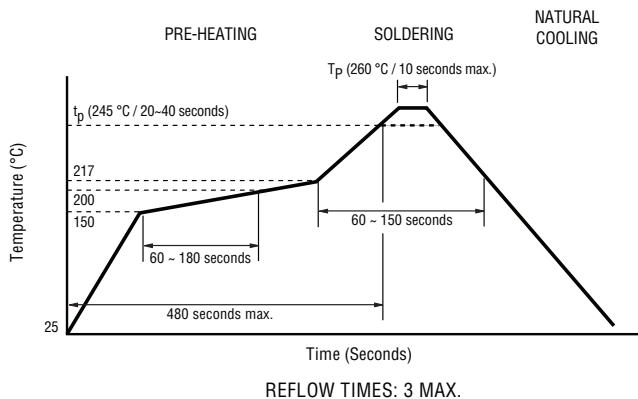


How to Order

SRP1580CA - 1R0M

Model _____
Value Code (see table) _____

Soldering Profile



Additional Information

Click these links for more information:



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[TECHNICAL LIBRARY](#)



[INVENTORY](#)



[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

..... 20 or 40 °C at rated I_{rms}¹

Rated Voltage.....40 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

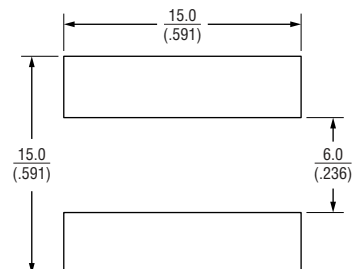
Wire Enameled copper

Terminal Finish Sn

Packaging..... 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.

Specifications are subject to change without notice.

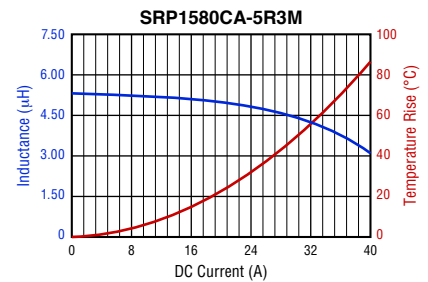
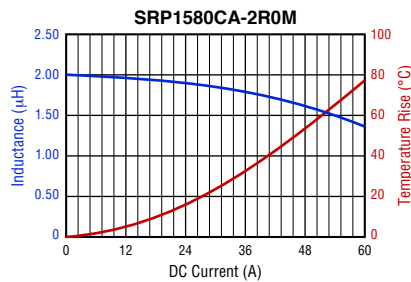
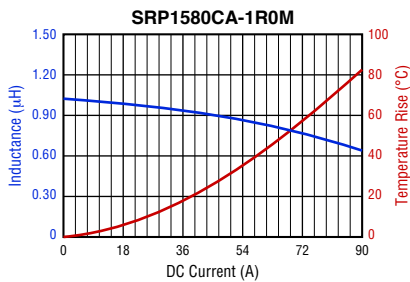
Users should verify actual device performance in their specific applications.

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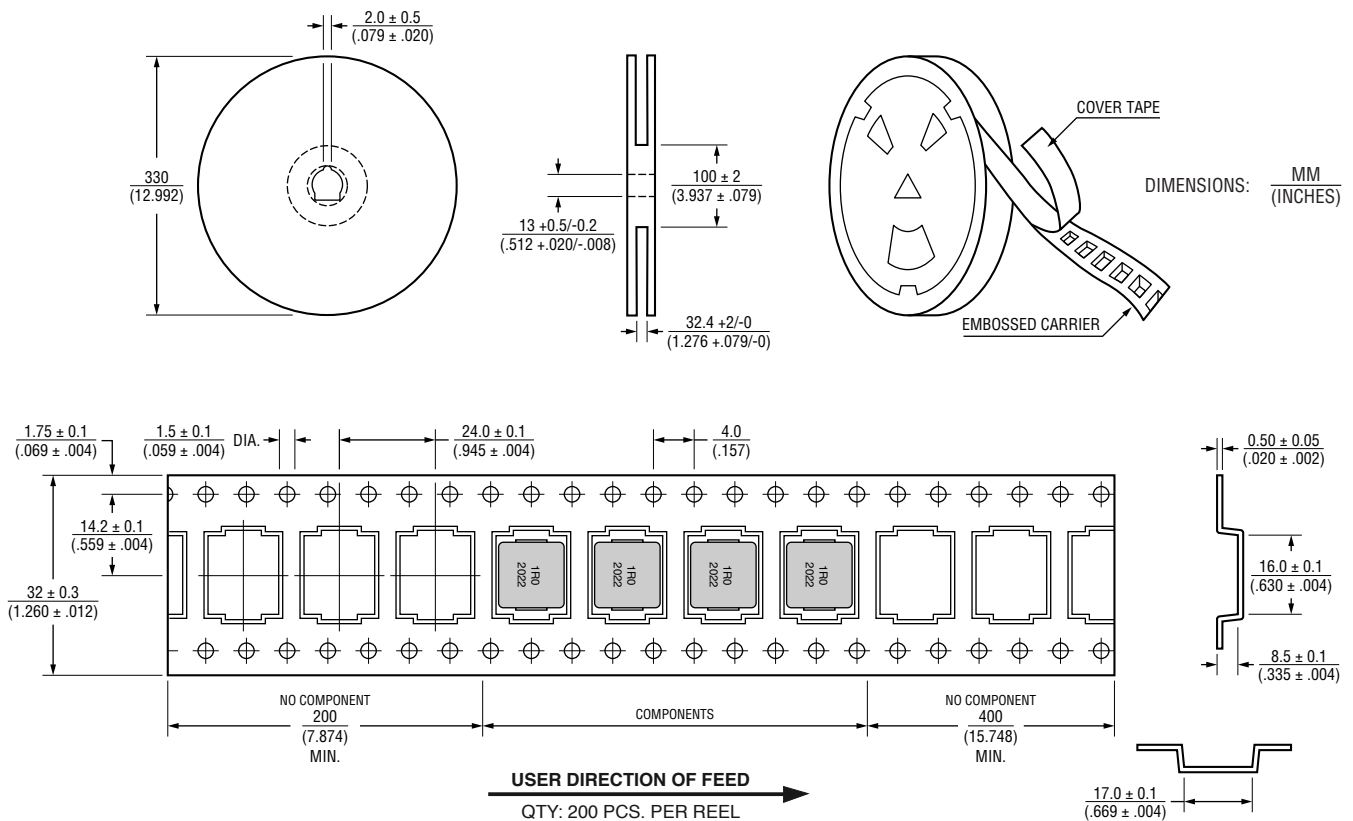
SRP1580CA Series - Shielded Power Inductors

BOURNS®

L vs. I Charts



Packaging Specifications



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02/21

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