

Features

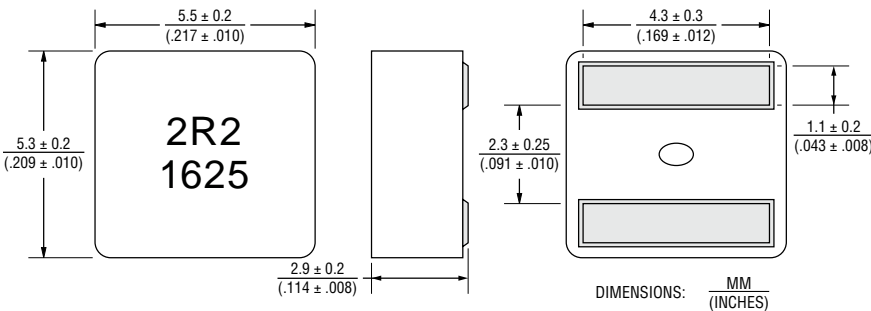
- Shielded construction
- Metal alloy powder core
- High saturation current
- Flat wire
- AEC-Q200 compliant
- RoHS compliant* and halogen free**

SRP5030CA Series – Shielded Power Inductors

Electrical Specifications @ 25 °C

Bourns Part Number	Inductance @ 100 kHz / 0.1 V		SRF (MHz) Typ.	DCR (mΩ) Typ.	DCR (mΩ) Max.	I _{rms} (A) Typ.		I _{sat} (A) Typ.
	L (μH)	Tol. %				20 °C Temp. Rise	40 °C Temp. Rise	
SRP5030CA-R15M	0.15	± 20 %	140	2.10	2.31	14.3	22.2	36
SRP5030CA-R16M	0.16	± 20 %	140	2.12	2.33	14.2	22.2	35
SRP5030CA-R33M	0.33	± 20 %	110	3.20	3.52	13.8	19.2	28
SRP5030CA-R56M	0.56	± 20 %	73	4.05	4.52	13.6	17.7	22.2
SRP5030CA-R60M	0.60	± 20 %	68	4.11	4.52	13.6	17.7	22
SRP5030CA-R80M	0.80	± 20 %	57	5.14	5.65	10.1	13.1	20
SRP5030CA-R82M	0.82	± 20 %	54	5.25	5.78	9.9	12.9	19.7
SRP5030CA-1R0M	1.0	± 20 %	50	6.90	7.60	9.0	12.2	16.5
SRP5030CA-1R2M	1.2	± 20 %	43	8.80	9.70	8.5	11.0	15
SRP5030CA-1R5M	1.5	± 20 %	38	10.1	11.2	8.0	10.5	14
SRP5030CA-1R8M	1.8	± 20 %	36	11.5	12.7	7.6	10.1	12.3
SRP5030CA-2R2M	2.2	± 20 %	33	13.2	14.5	7.2	9.7	10
SRP5030CA-3R3M	3.3	± 20 %	25	21.0	23.1	5.9	8.1	9.5
SRP5030CA-3R6M	3.6	± 20 %	23	25.0	27.5	4.6	6.5	9
SRP5030CA-4R7M	4.7	± 20 %	21	33.0	36.3	4.3	5.9	8.2

Product Dimensions

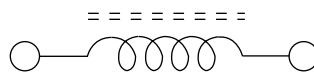


How to Order

Model SRP5030CA - 1R0M

Value Code (see table) _____

Schematic



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 I_{sat}

Temperature Rise 20 or 40 °C at rated I_{rms}¹

MSL 1

ESD Classification (HBM) N/A

Note 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

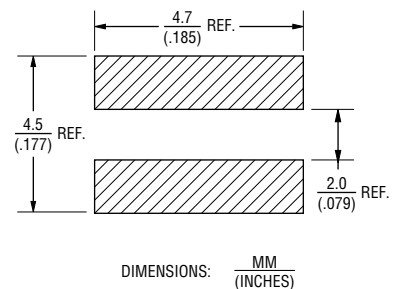
Core Metal alloy powder

Wire Enameled copper

Terminal Finish Sn

Packaging 2000 pcs. per 13-inch reel

Recommended Layout



BOURNS®

Americas: Tel: +1 951-781-5500

Email: americus@bourns.com

Mexico: Tel: +52-614-478-0400

Email: mexicus@bourns.com

Asia: Tel: +886-2-2562-4117

Email: asiacus@bourns.com

EMEA: Tel: +36 88 885 877

Email: eurocus@bourns.com

www.bourns.com



WARNING
Cancer and Reproductive Harm
www.P65Warnings.ca.gov

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

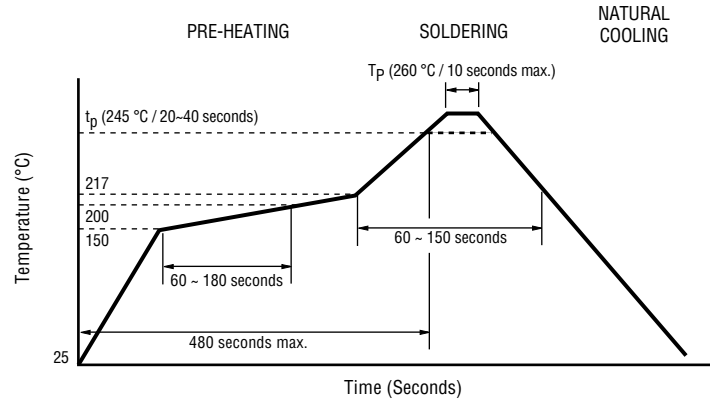
** Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

Specifications are subject to change without notice. Users should verify actual device performance in their specific applications. The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at www.bourns.com/docs/legal/disclaimer.pdf.

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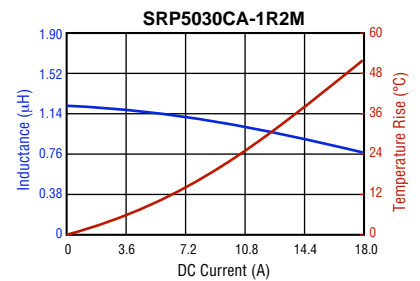
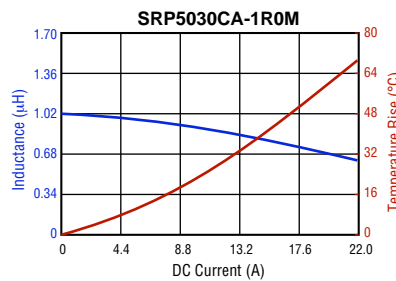
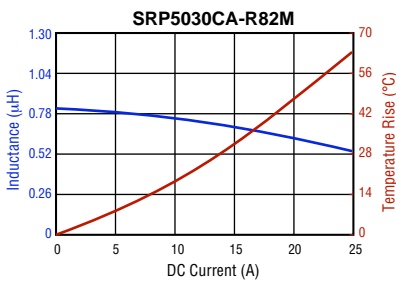
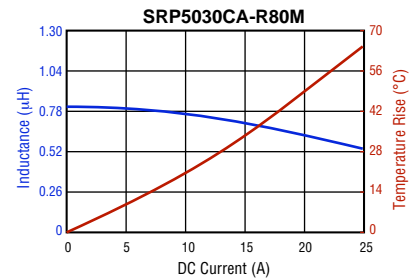
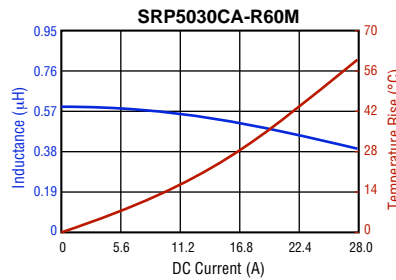
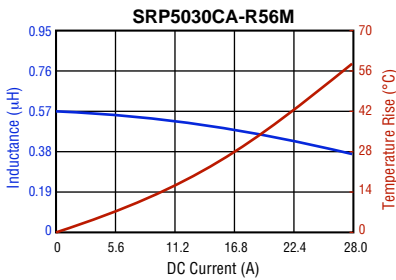
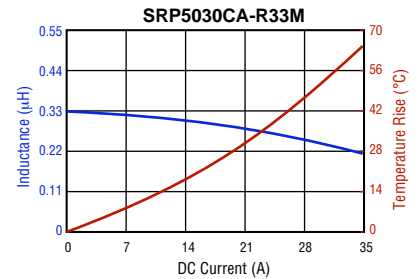
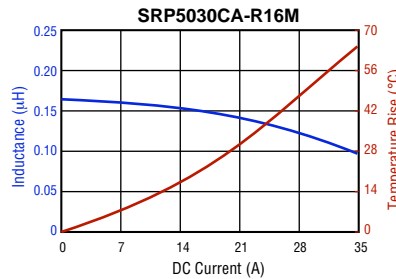
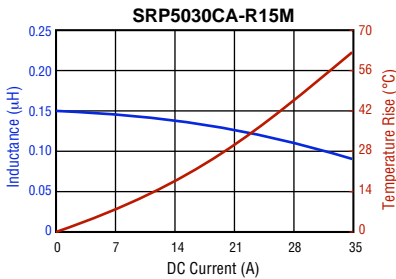
Soldering Profile



REFLOW TIMES: 3 MAX.

NOTE: 0.12 mm thick solder paste recommended.

L vs. I Charts



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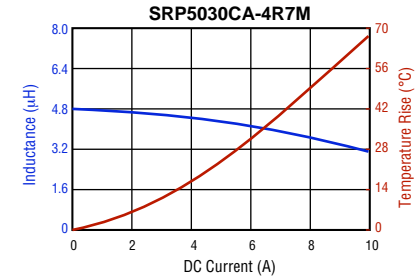
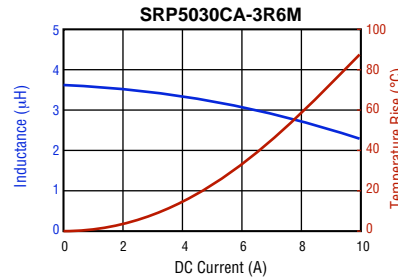
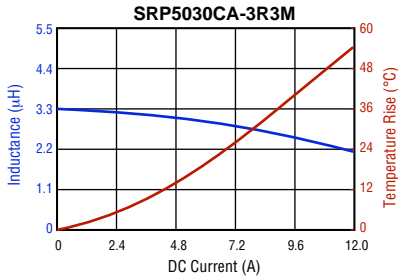
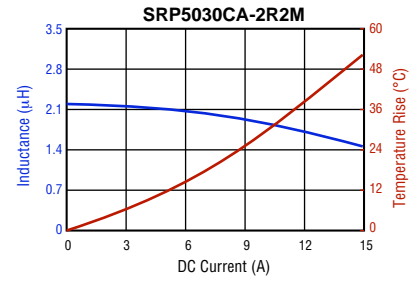
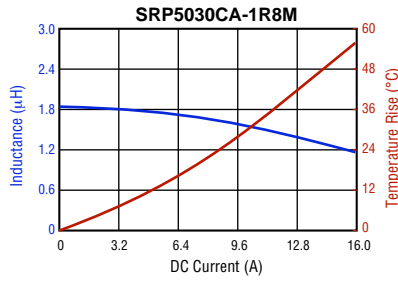
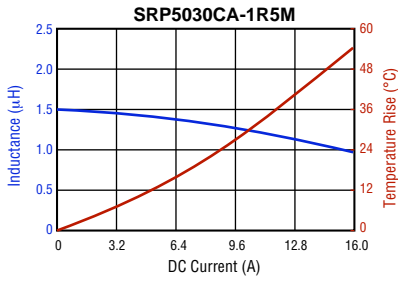
Users should verify actual device performance in their specific applications.

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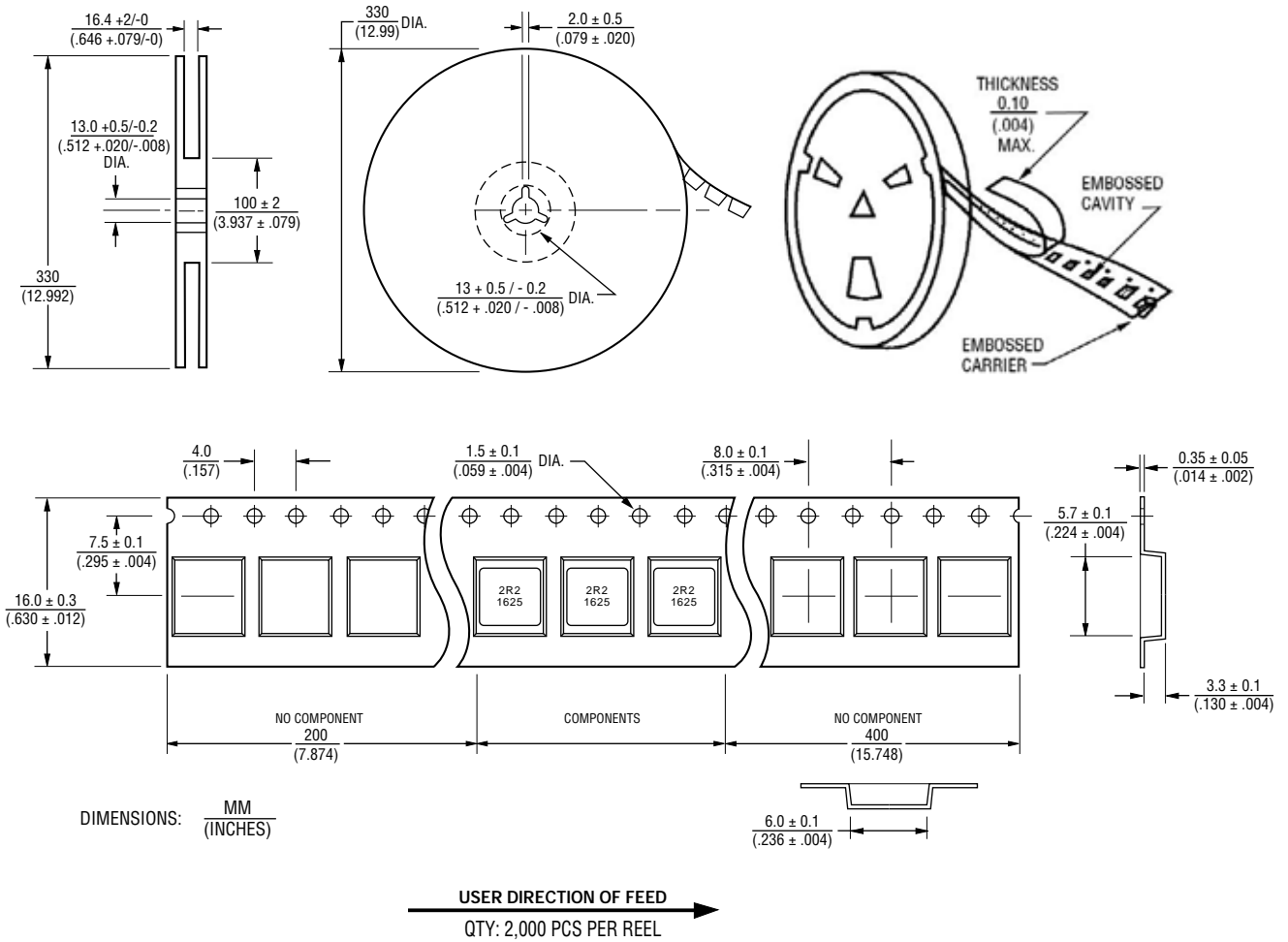
L vs. I Charts (Continued)



SRP5030CA Series - Shielded Power Inductors

BOURNS®

Packaging Specifications



REV. 06/24

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