



**THE DATASHEET OF
SRP5030CA-2R2M**





Features

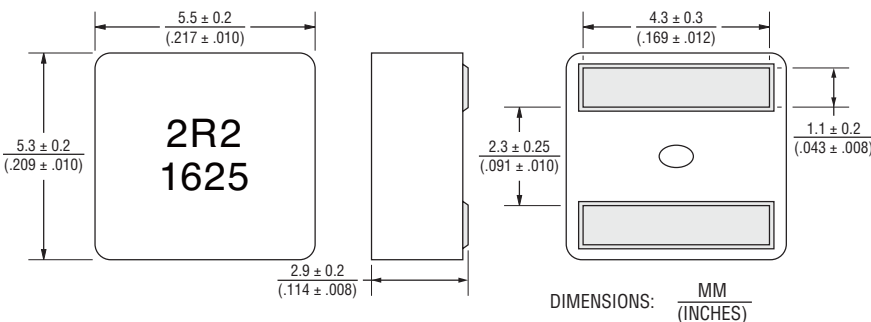
- Shielded construction
- Metal alloy powder core
- High saturation current
- Flat wire
- AEC-Q200 compliant
- RoHS compliant* and halogen free**

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 | |
| 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 |

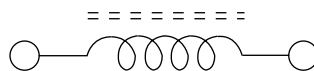
Product Dimensions



How to Order

Model **SRP5030CA - 1R0M**
 Value Code (see table)

Schematic



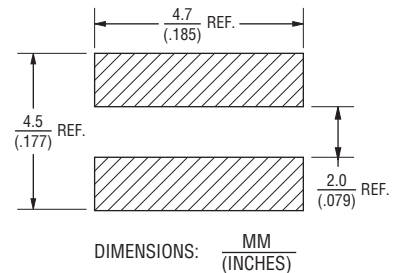
General Specifications

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 Rise20 or 40 °C at rated Irms!
 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
 WireEnameled copper
 Terminal FinishSn
 Packaging..... 2000 pcs. per 13-inch reel

Recommended Layout



BOURNS®

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 Tel: +886-2 2562-4117
 Email: asiacus@bourns.com

Europe:
 Tel: +36 88 885 877
 Email: eurocus@bourns.com

The Americas:
 Tel: +1-951 781-5500
 Email: americus@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.

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SRP5030CA Series – Shielded Power Inductors

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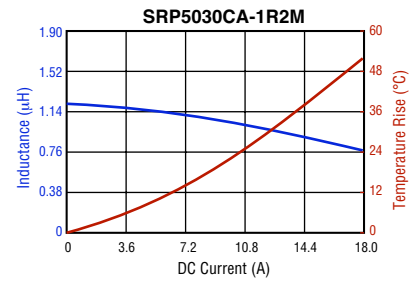
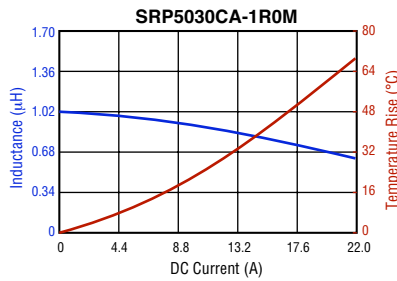
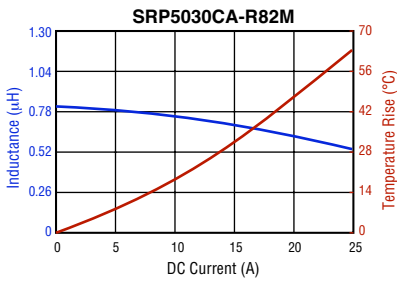
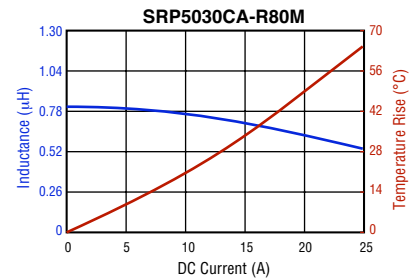
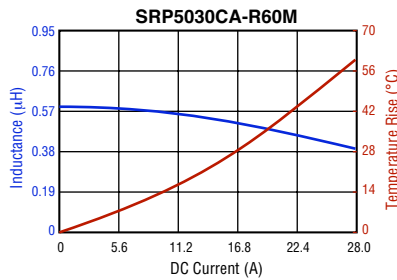
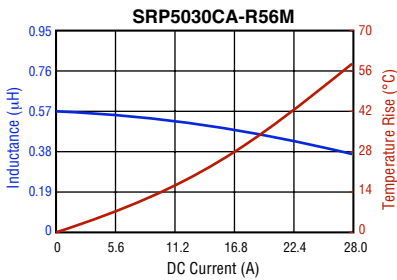
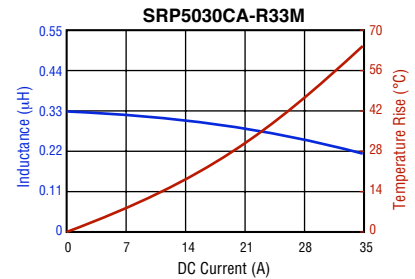
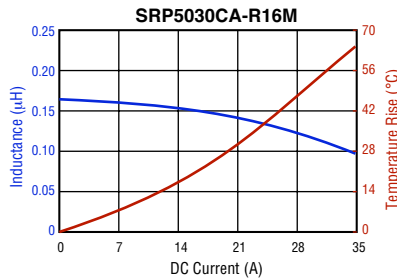
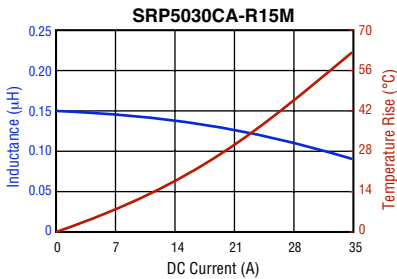
Soldering Profile



REFLOW TIMES: 3 MAX.

NOTE: 0.12 mm thick solder paste recommended.

L vs. I Charts



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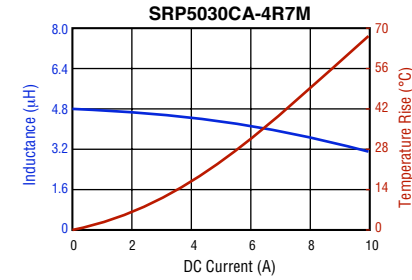
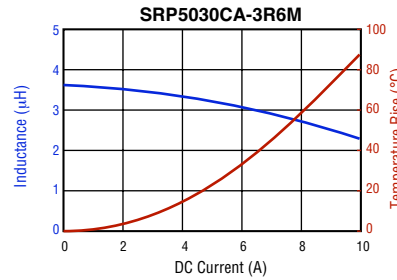
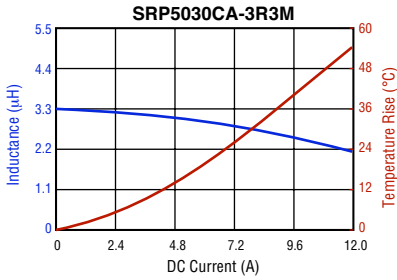
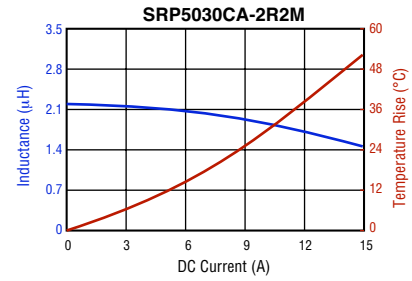
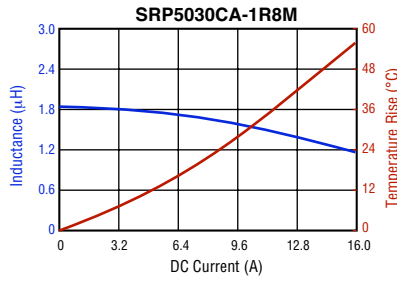
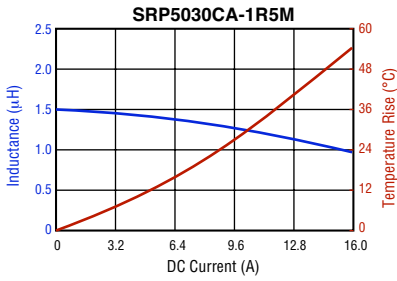
Users should verify actual device performance in their specific applications.

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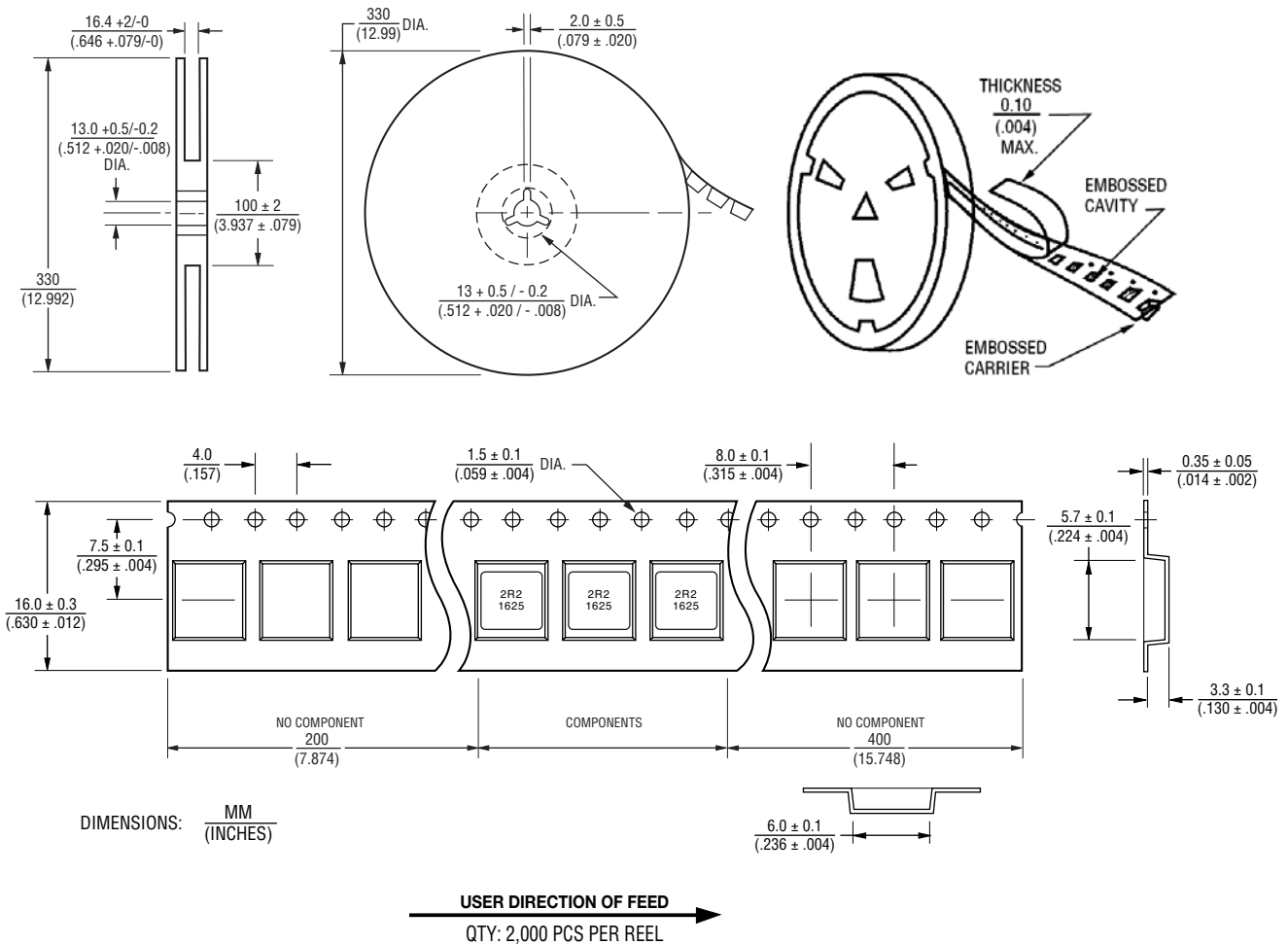
L vs. I Charts (Continued)



SRP5030CA Series – Shielded Power Inductors

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Packaging Specifications



REV. 04/20

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