

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

General Specifications

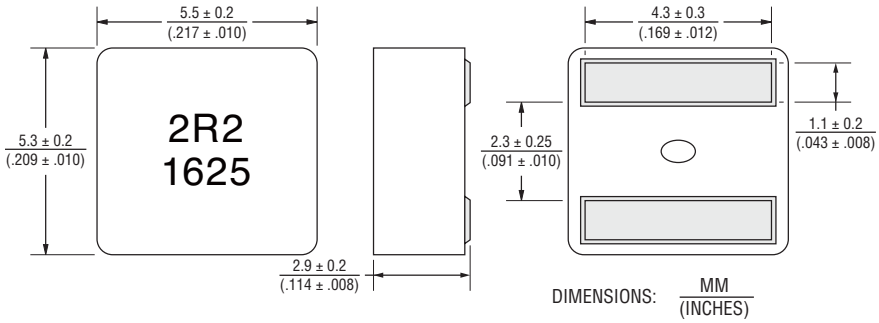
Operating Temperature .....-55 °C to +155 °C (Temperature rise included)
Storage Temperature (Component) .....-55 °C to +155 °C
Rated Current ..... Inductance drops 30 % at Isat
Temperature Rise .....20 or 40 °C at rated Irms[1]
MSL 1
ESD Classification (HBM)..... N/A

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.

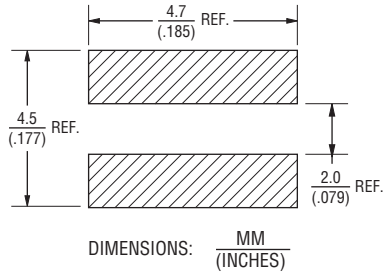
Materials

Core.....Metal alloy powder
Wire .....Enameled copper
Terminal Finish .....Sn
Packaging..... 2000 pcs. per 13-inch reel

Product Dimensions



Recommended Layout

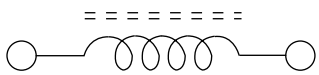


How to Order

SRP5030CA - 1R0M

Model
Value Code (see table)

Schematic



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Tel: +886-2 2562-4117
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Tel: +36 88 885 877
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Email: americus@bourns.com

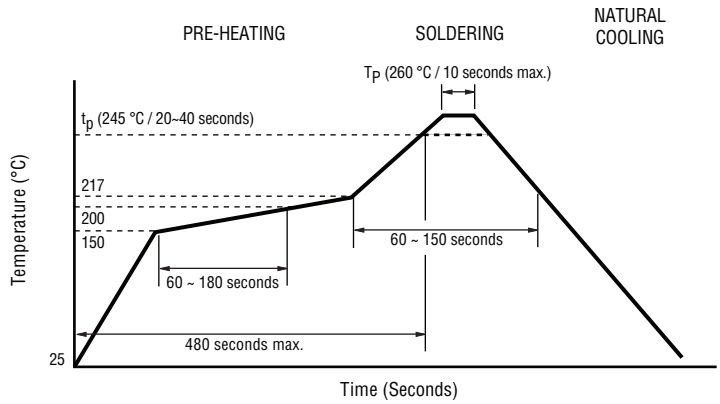
www.bourns.com

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.

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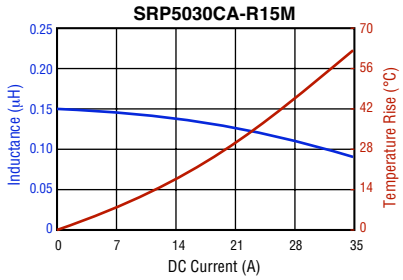
Soldering Profile

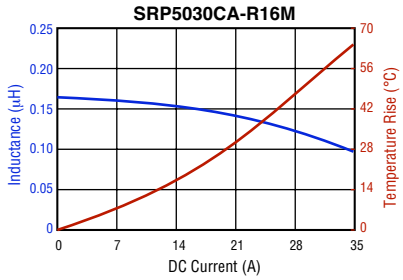


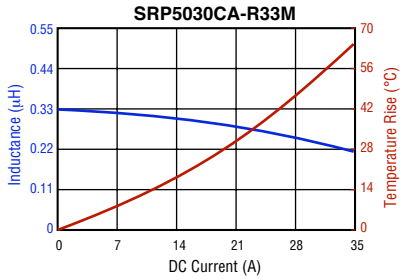
REFLOW TIMES: 3 MAX.

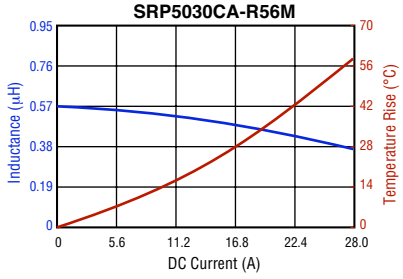
NOTE: 0.12 mm thick solder paste recommended.

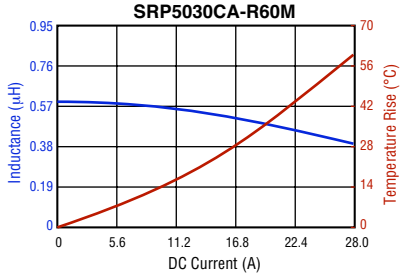
L vs. I Charts

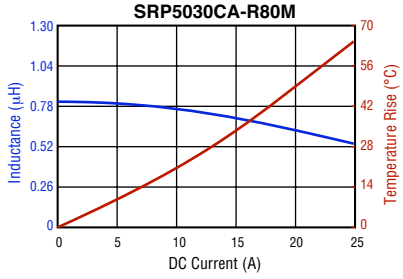


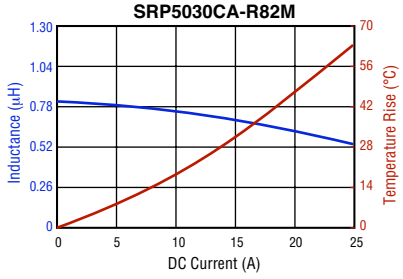


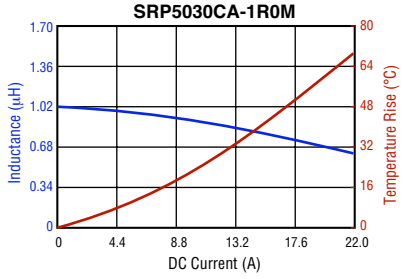


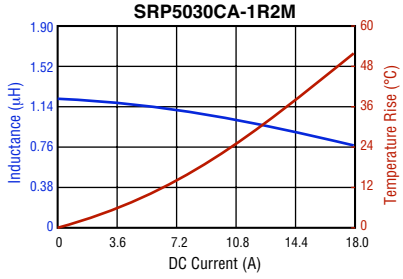






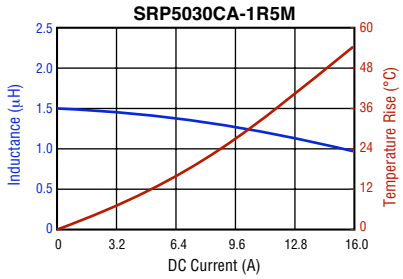


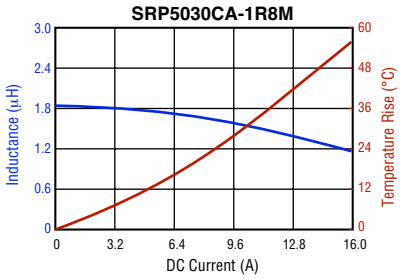


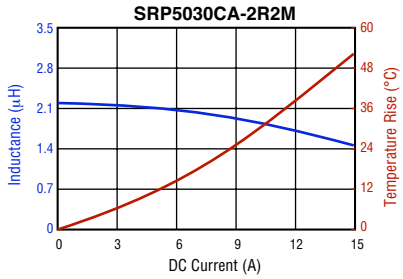


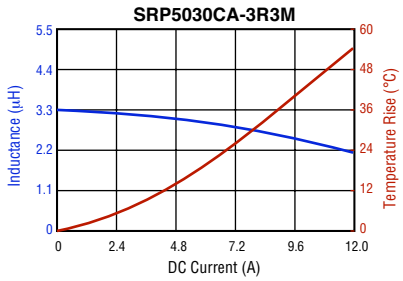
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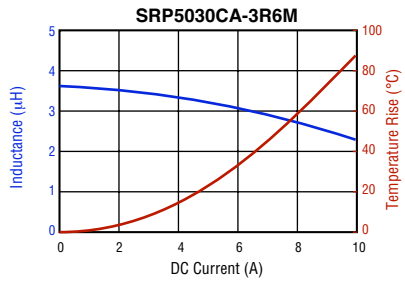
L vs. I Charts (Continued)

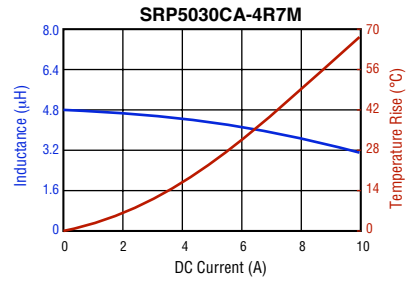






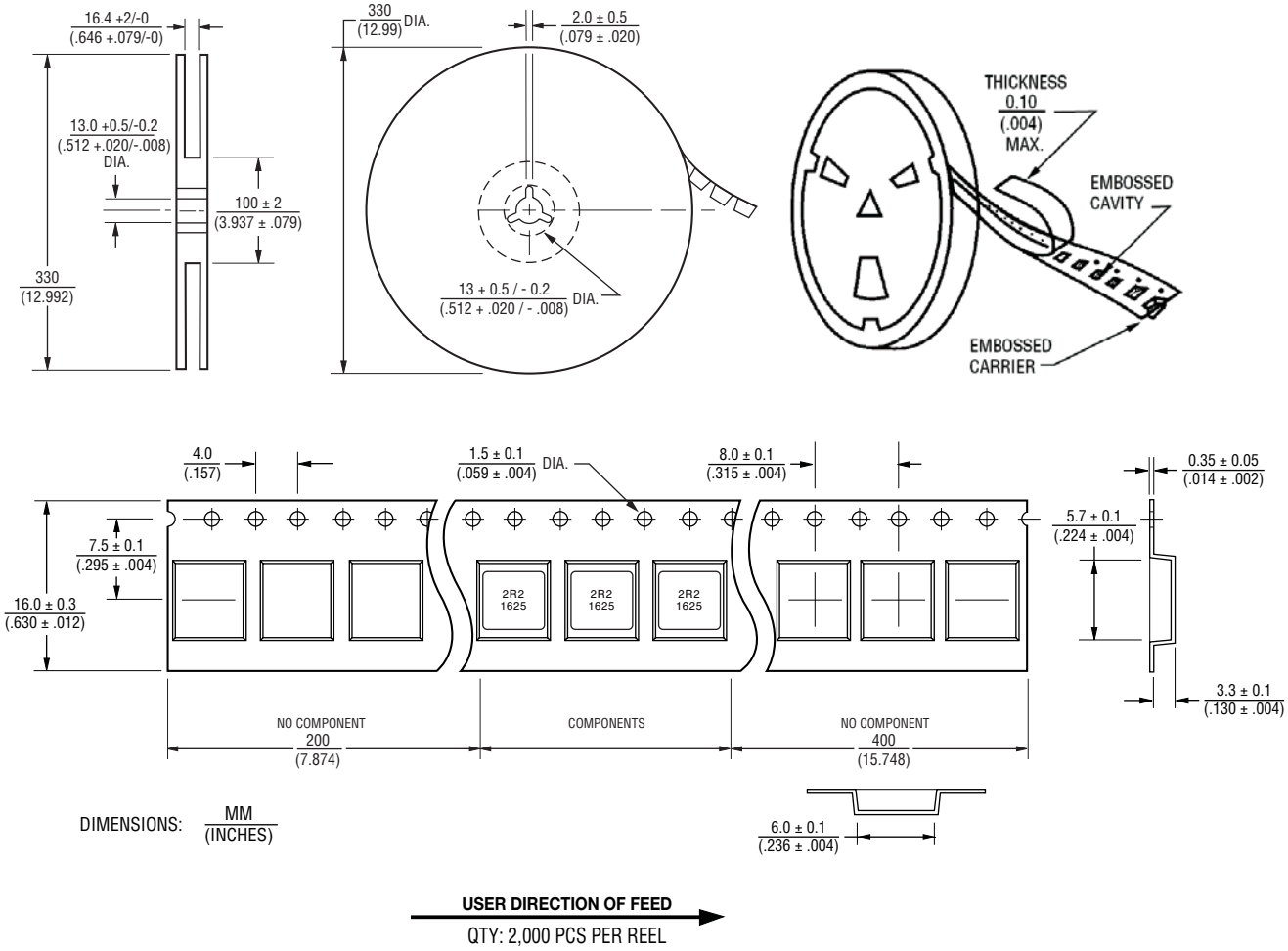






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Packaging Specifications



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