

Features

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

Applications

- Select automotive applications:
  - Driver assistant
  - Infotainment
  - Lighting
- DC-DC converters
- Power supplies

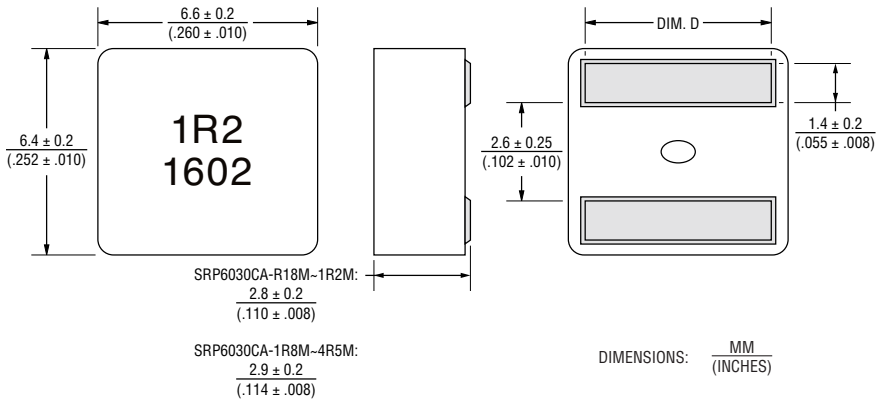
BOURNS®

SRP6030CA Series – Shielded Power Inductors

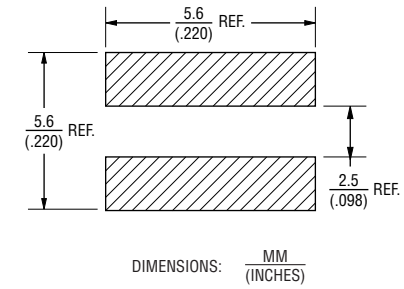
Electrical Specifications @ 25 °C

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.	D Dim. (mm) ± 0.3 mm
	L (μH)	Tol. %				20 °C Temp. Rise	40 °C Temp. Rise		
SRP6030CA-R18M	0.18	± 20 %	143	1.6	1.75	24	32	40	5.3
SRP6030CA-R33M	0.33	± 20 %	78	2.25	2.5	20	25	32	5.55
SRP6030CA-R56M	0.56	± 20 %	70	3	3.31	17	22	29	5.3
SRP6030CA-1R0M	1.0	± 20 %	52	5.5	6.05	13	18	23	5.2
SRP6030CA-1R2M	1.2	± 20 %	47	6.7	7.4	12	16	22	5.15
SRP6030CA-1R8M	1.8	± 20 %	33	9.2	10.2	10	14	18.2	5.1
SRP6030CA-2R2M	2.2	± 20 %	29	11	12.2	7	10	15.9	5.05
SRP6030CA-3R3M	3.3	± 20 %	25	18.8	20.8	6	8	12.2	5
SRP6030CA-4R5M	4.5	± 20 %	20	23	25.3	5	7	10	5

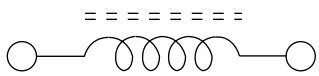
Product Dimensions



Recommended Layout



Schematic



How to Order

SRP6030CA - 1R2M

Model

Value Code (see table)

Additional Information

Click these links for more information:

PRODUCT SELECTOR | 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 Voltage ..... 40 V ref.

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..... 1000 pcs. per 13-inch reel

CALIFORNIA WARNING: Can expose you to lead, a carcinogen and reproductive toxicant. See www.P65Warnings.ca.gov

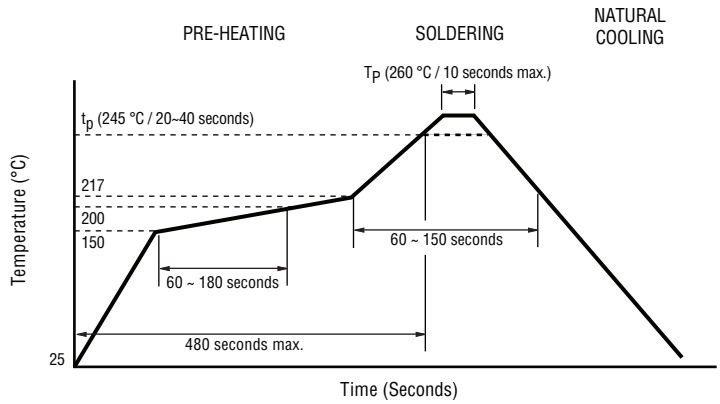
* RoHS Directive 2015/863, Mar 31, 2015 and Annex.

** 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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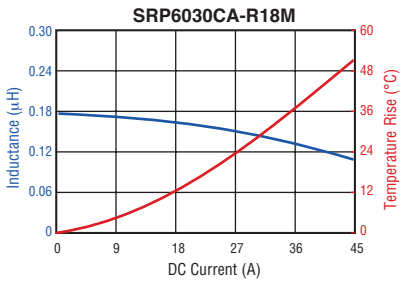
Soldering Profile

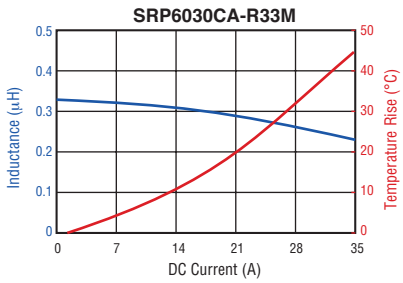


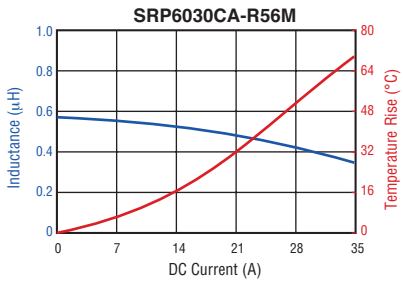
REFLOW TIMES: 3 MAX.

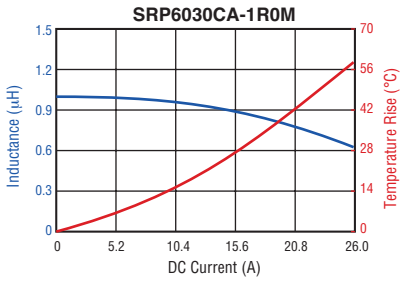
NOTE: 0.15 mm thick solder paste recommended.

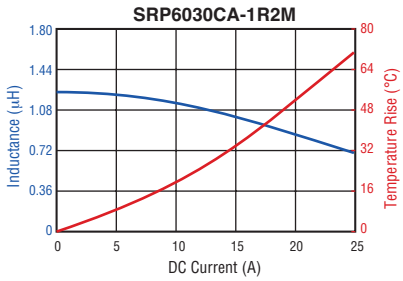
L vs. I Charts

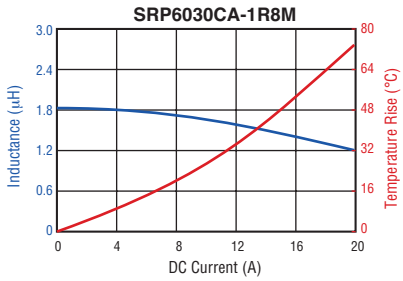


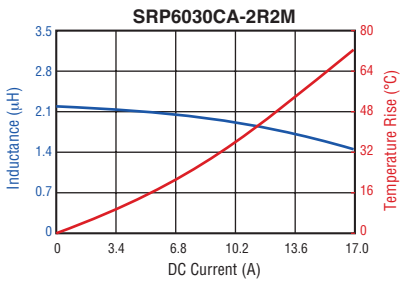


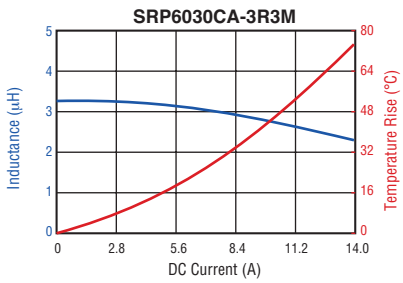


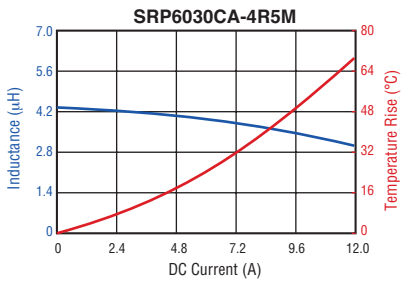








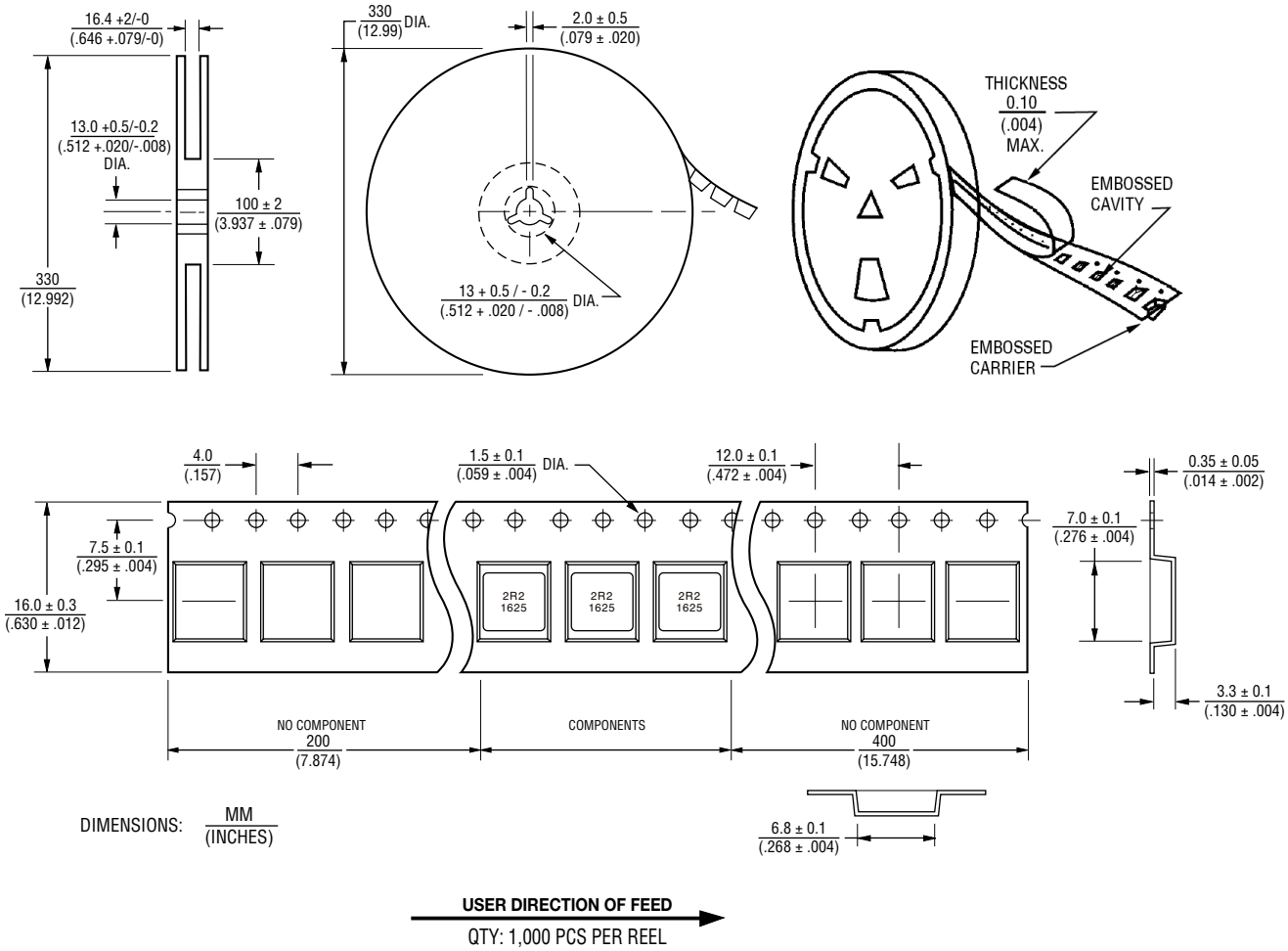




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Packaging Specifications



BOURNS®

Asia-Pacific: Tel: +886-2 2562-4117 • Email: asiacus@bourns.com
Europe: Tel: +36 88 885 877 • Email: eurocus@bourns.com
Mexico: Tel: +52 614 478 0400 • Email: mexicus@bourns.com
The Americas: Tel: +1-951 781-5500 • Email: americus@bourns.com
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