



**THE DATASHEET OF  
SRP6030CA-1R0M**





## Features

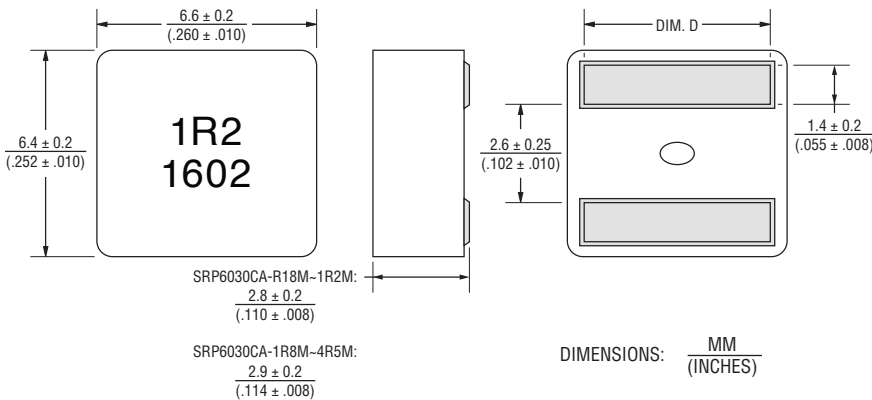
- Shielded construction
- Metal alloy powder core
- High saturation current
- Flat wire
- AEC-Q200 compliant
- RoHS compliant\* and halogen free\*\*

## 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 <sub>rms</sub> (A) Typ.		I <sub>sat</sub> (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



### 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<sub>sat</sub>

Temperature Rise ..... 20 or 40 °C at rated I<sub>rms</sub><sup>1</sup>

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

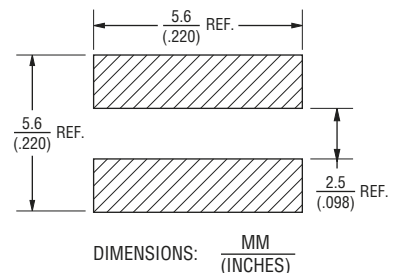
Core ..... Metal alloy powder

Wire ..... Enameled copper

Terminal Finish ..... Sn

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

### Recommended Layout



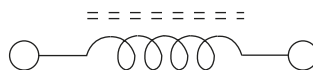
### How to Order

SRP6030CA - 1R2M

Model \_\_\_\_\_

Value Code (see table) \_\_\_\_\_

### Schematic



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**WARNING Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://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.

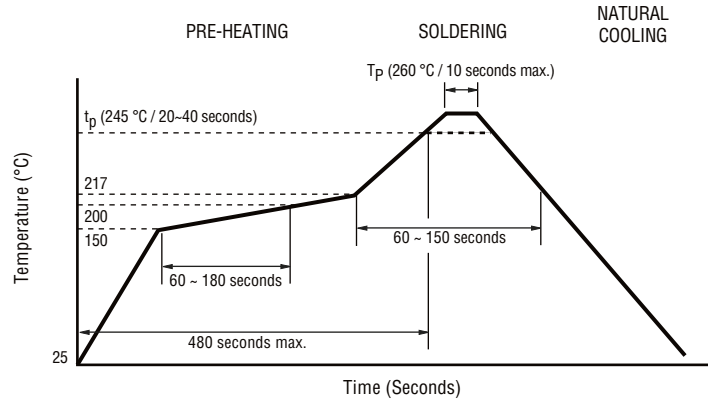
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# SRP6030CA Series – Shielded Power Inductors

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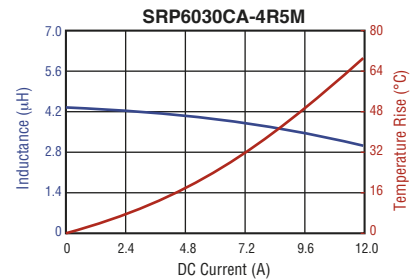
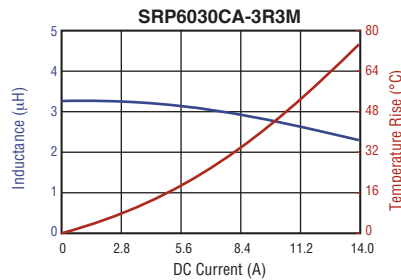
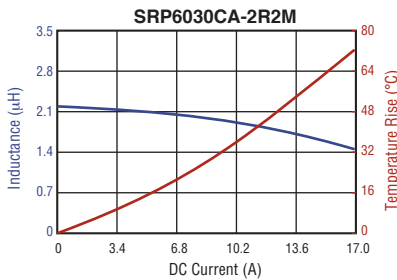
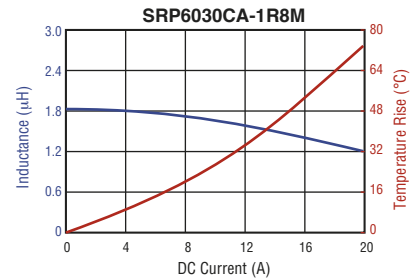
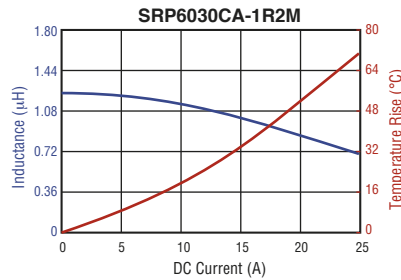
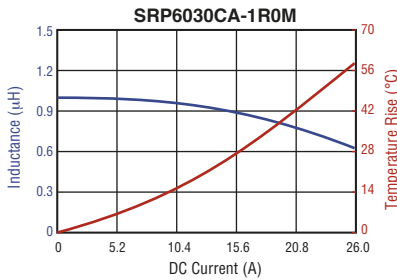
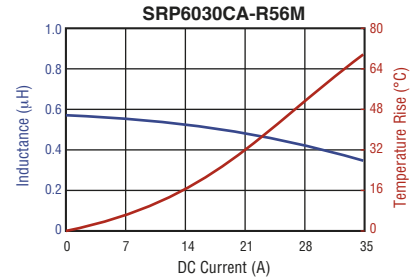
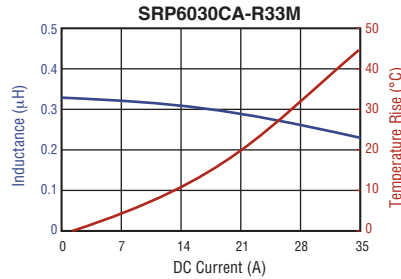
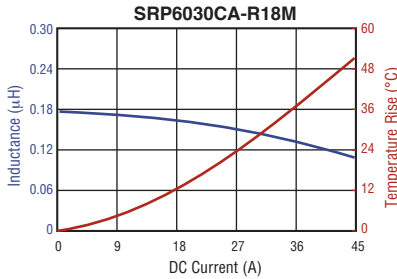
## Soldering Profile



REFLOW TIMES: 3 MAX.

NOTE: 0.15 mm thick solder paste recommended.

## L vs. I Charts

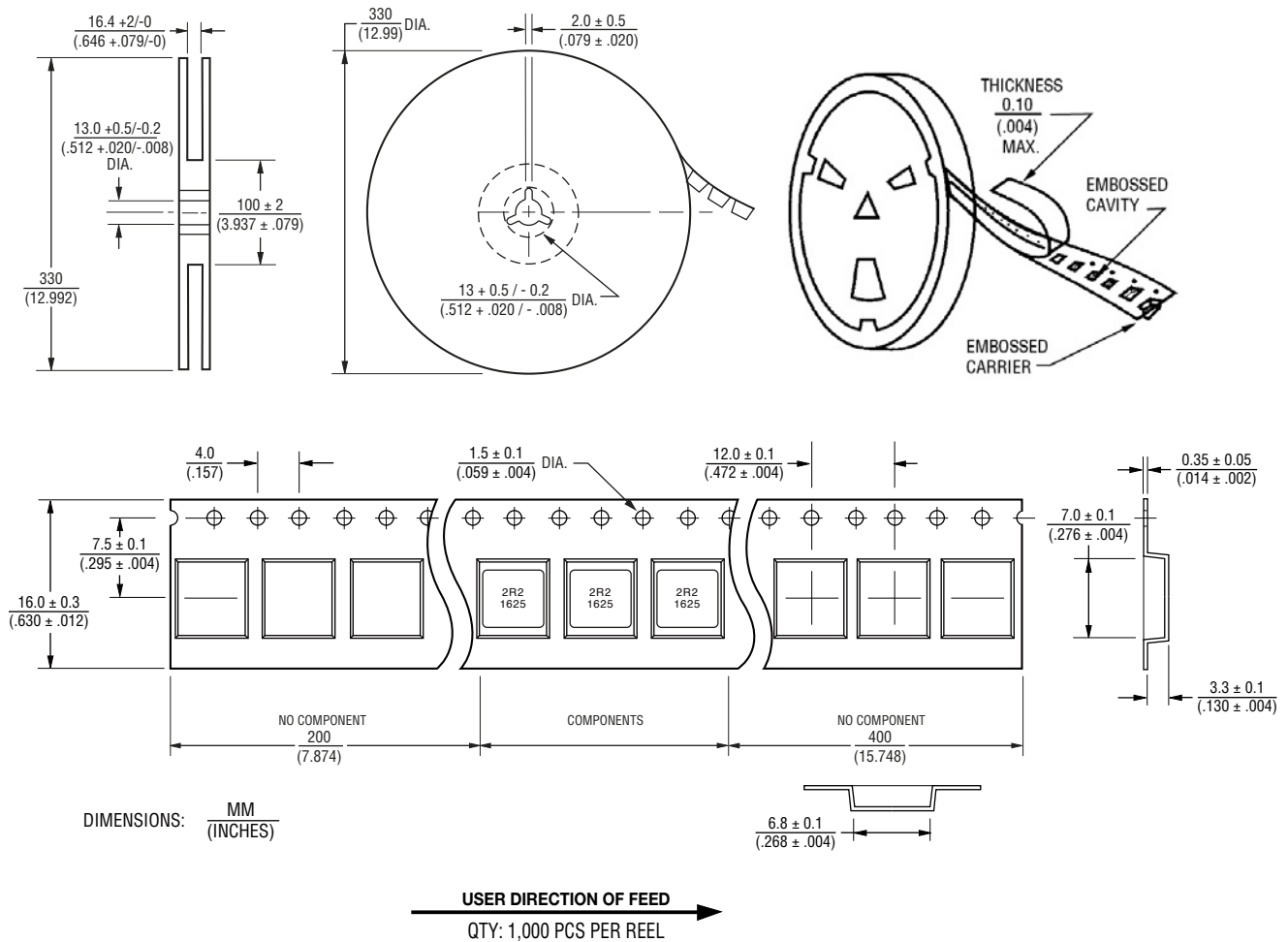


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# SRP6030CA Series – Shielded Power Inductors

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## Packaging Specifications



06/18

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