



## Features

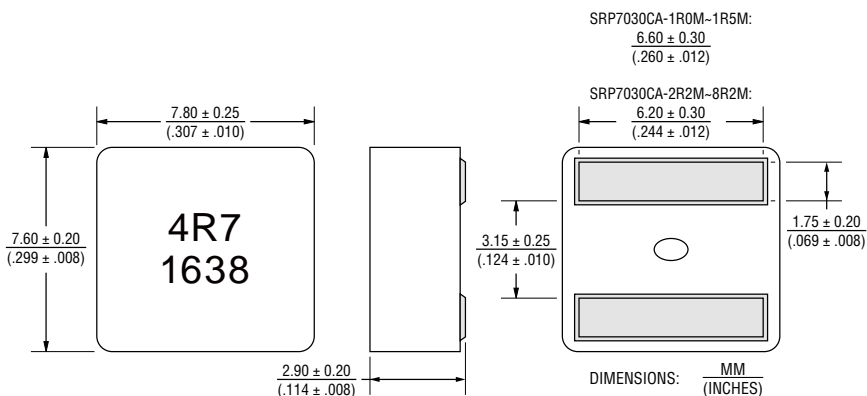
- Shielded construction
- Metal alloy powder core
- High saturation current
- Flat wire
- AEC-Q200 compliant
- RoHS compliant\* and halogen free\*\*

## SRP7030CA Series – Shielded Power Inductors

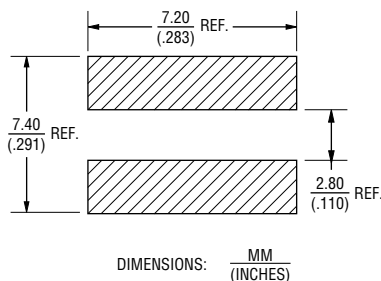
### Electrical Specifications @ 25 °C

Bourns Part Number	Inductance @ 100 kHz / 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	
SRP7030CA-1R0M	1.0	± 20 %	35	4.55	5.00	16.1	21.8	30.0
SRP7030CA-1R5M	1.5	± 20 %	31	7.50	8.25	12.0	15.3	25.0
SRP7030CA-2R2M	2.2	± 20 %	38	12.40	13.70	10.0	13.0	19.0
SRP7030CA-3R3M	3.3	± 20 %	22	16.30	18.00	8.0	10.0	15.0
SRP7030CA-4R7M	4.7	± 20 %	18	24.20	26.70	6.9	9.0	13.5
SRP7030CA-5R6M	5.6	± 20 %	16	30.10	33.20	5.3	7.3	12.5
SRP7030CA-6R8M	6.8	± 20 %	14	38.60	42.50	4.5	6.8	12.0
SRP7030CA-8R2M	8.2	± 20 %	12	44.30	48.73	3.0	5.9	10.2

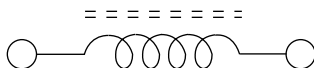
### Product Dimensions



### Recommended Layout



### Schematic



### How to Order

SRP7030CA - 1R5M

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

### 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 Isat  
Temperature Rise ..... 20 or 40 °C  
at rated Irms<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 ..... 1500 pcs. per 13-inch reel



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

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

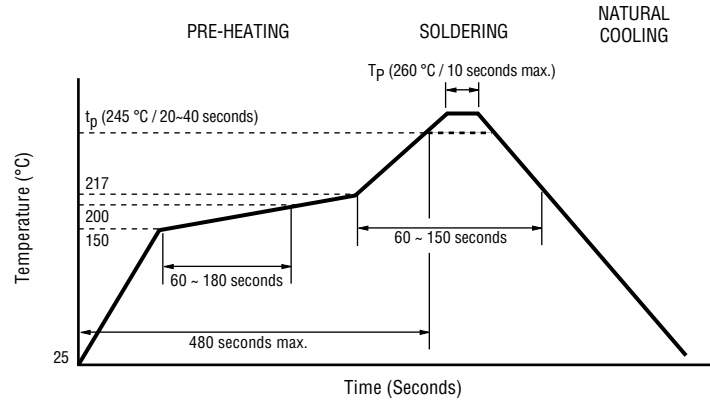
\*\* Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

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# SRP7030CA Series - Shielded Power Inductors

**BOURNS®**

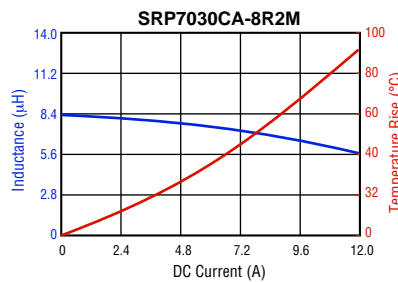
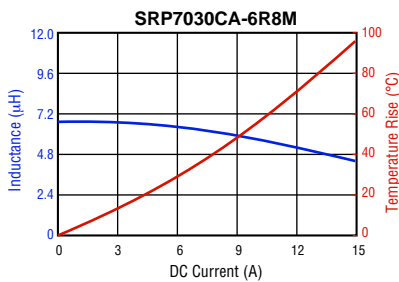
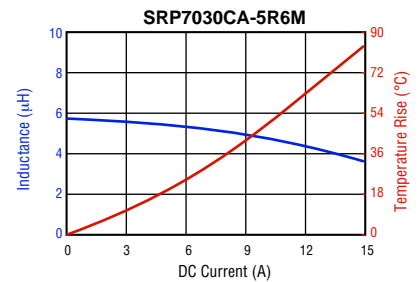
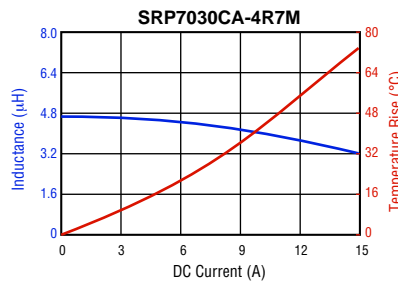
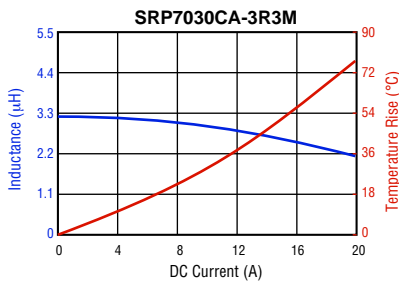
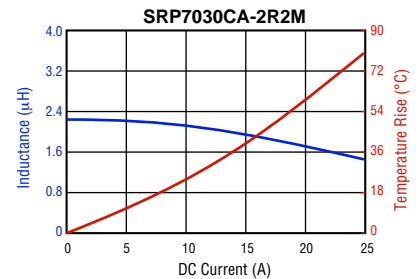
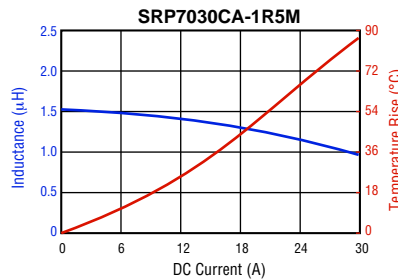
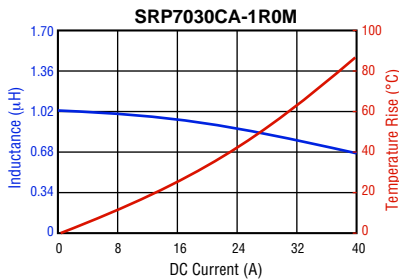
## Soldering Profile



REFLOW TIMES: 3 MAX.

NOTE: 0.15 mm thick solder paste recommended.

## L vs. I Charts



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**BOURNS®**

Technical drawing of a 12V 100Ah battery pack, showing dimensions in millimeters (mm) and inches (inches).

**Top View Dimensions:**

- Overall Width:  $16.4 \pm 2 / 0$  mm ( $.646 \pm .079 / 0$ ) inches
- Overall Height:  $330$  mm ( $12.992$ ) inches
- Terminal Spacing:  $13.0 \pm 0.5 / -0.2$  mm ( $.512 \pm .020 / -.008$ ) inches
- Terminal Diameter:  $2.0 \pm 0.5$  mm ( $.079 \pm .020$ ) inches
- Internal Spacing:  $100 \pm 2$  mm ( $3.937 \pm .079$ ) inches
- Internal Diameter:  $330$  mm ( $12.992$ ) inches
- Internal Diameter (DIA.):  $13 \pm 0.5 / -0.2$  mm ( $.512 \pm .020 / -.008$ ) inches

**Side View Dimensions:**

- Overall Height:  $13.0 \pm 0.5 / -0.2$  mm ( $.512 \pm .020 / -.008$ ) inches
- Terminal Diameter:  $2.0 \pm 0.5$  mm ( $.079 \pm .020$ ) inches
- Internal Diameter:  $330$  mm ( $12.992$ ) inches
- Internal Diameter (DIA.):  $13 \pm 0.5 / -0.2$  mm ( $.512 \pm .020 / -.008$ ) inches

**Front View Dimensions:**

- Overall Width:  $16.4 \pm 2 / 0$  mm ( $.646 \pm .079 / 0$ ) inches
- Overall Height:  $330$  mm ( $12.992$ ) inches
- Terminal Spacing:  $13.0 \pm 0.5 / -0.2$  mm ( $.512 \pm .020 / -.008$ ) inches
- Terminal Diameter:  $2.0 \pm 0.5$  mm ( $.079 \pm .020$ ) inches
- Internal Spacing:  $100 \pm 2$  mm ( $3.937 \pm .079$ ) inches
- Internal Diameter:  $330$  mm ( $12.992$ ) inches
- Internal Diameter (DIA.):  $13 \pm 0.5 / -0.2$  mm ( $.512 \pm .020 / -.008$ ) inches

**Top View Details:**

- COVER TAPE
- EMBOSSED CARRIER

**Front View Details:**

- Overall Width:  $16.4 \pm 2 / 0$  mm ( $.646 \pm .079 / 0$ ) inches
- Overall Height:  $330$  mm ( $12.992$ ) inches
- Terminal Spacing:  $13.0 \pm 0.5 / -0.2$  mm ( $.512 \pm .020 / -.008$ ) inches
- Terminal Diameter:  $2.0 \pm 0.5$  mm ( $.079 \pm .020$ ) inches
- Internal Spacing:  $100 \pm 2$  mm ( $3.937 \pm .079$ ) inches
- Internal Diameter:  $330$  mm ( $12.992$ ) inches
- Internal Diameter (DIA.):  $13 \pm 0.5 / -0.2$  mm ( $.512 \pm .020 / -.008$ ) inches

**Bottom View Dimensions:**

- Overall Width:  $16.4 \pm 2 / 0$  mm ( $.646 \pm .079 / 0$ ) inches
- Overall Height:  $330$  mm ( $12.992$ ) inches
- Terminal Spacing:  $13.0 \pm 0.5 / -0.2$  mm ( $.512 \pm .020 / -.008$ ) inches
- Terminal Diameter:  $2.0 \pm 0.5$  mm ( $.079 \pm .020$ ) inches
- Internal Spacing:  $100 \pm 2$  mm ( $3.937 \pm .079$ ) inches
- Internal Diameter:  $330$  mm ( $12.992$ ) inches
- Internal Diameter (DIA.):  $13 \pm 0.5 / -0.2$  mm ( $.512 \pm .020 / -.008$ ) inches

**Bottom View Details:**

- NO COMPONENT 200 (7.874)
- COMPONENTS 400 (15.748)
- NO COMPONENT 400 (15.748)

**Dimensions:**

- MM (INCHES)
- USER DIRECTION OF FEED
- QTY: 1,500 PCS PER REEL

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