



Features

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

Applications

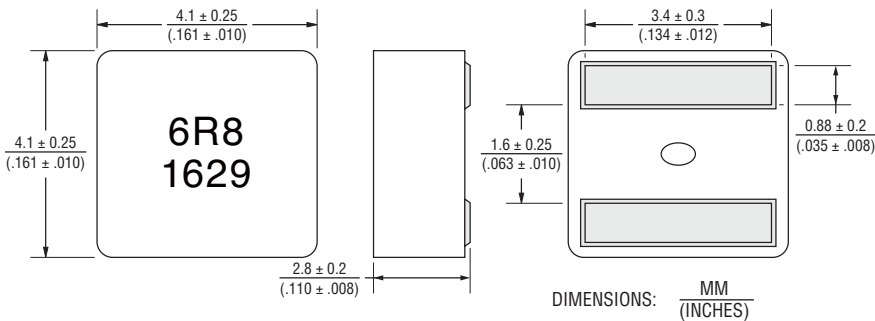
- Selected automotive applications:
 - Driver assistant
 - Infotainment
 - Lighting
- DC/DC converters
- Power supplies

SRP4030FA Series – Shielded Power Inductors

Electrical Specifications @ 25 °C

| Bourns Part Number | Inductance @ 100 kHz / 0.1 V | | Q (Min.) @ 100 kHz | 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 | 10 % L Drop | 20 % L Drop | 30 % L Drop |
| SRP4030FA-R90M | 0.9 | ± 20 % | 10 | 60 | 9.1 | 10.1 | 8.2 | 11.2 | 5.2 | 7.0 | 10.0 |
| SRP4030FA-1R0M | 1.0 | ± 20 % | 10 | 58 | 9.1 | 10.1 | 8.0 | 11.0 | 5.0 | 6.8 | 9.8 |
| SRP4030FA-3R3M | 3.3 | ± 20 % | 10 | 28 | 26.0 | 28.6 | 5.0 | 6.6 | 3.3 | 4.8 | 6.2 |
| SRP4030FA-4R7M | 4.7 | ± 20 % | 10 | 27 | 40.1 | 44.1 | 3.9 | 5.1 | 2.8 | 4.2 | 5.5 |
| SRP4030FA-6R8M | 6.8 | ± 20 % | 15 | 26 | 67.4 | 74.1 | 3.1 | 4.0 | 2.3 | 3.5 | 4.6 |

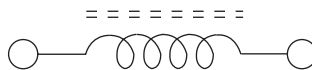
Product Dimensions



How to Order



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
10, 20 or 30 % at Isat

Temperature Rise20 or 40 °C
at rated Irms¹

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

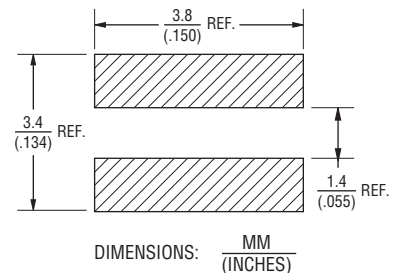
Core Metal alloy powder

Wire Enameled copper

Terminal Finish Sn

Packaging 2000 pcs. per 13-inch reel

Recommended Layout



BOURNS®

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EMEA: Tel: +36 88 520 390 • Email: eurocus@bourns.com

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

www.bourns.com

* 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.

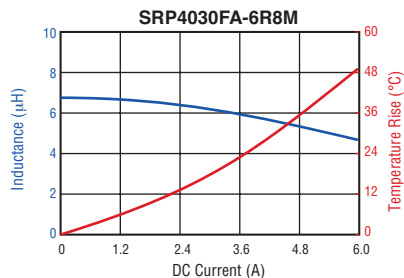
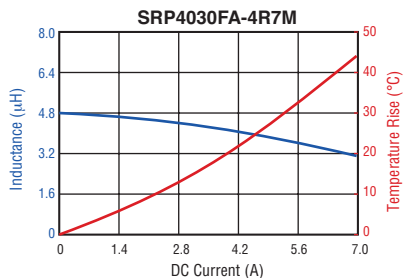
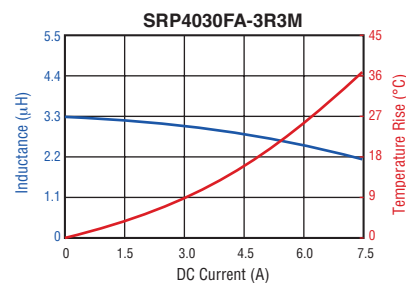
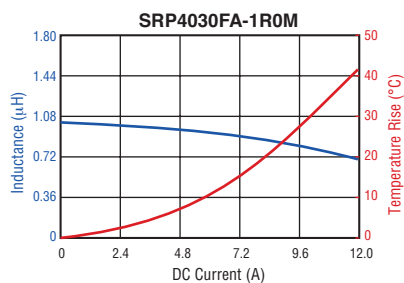
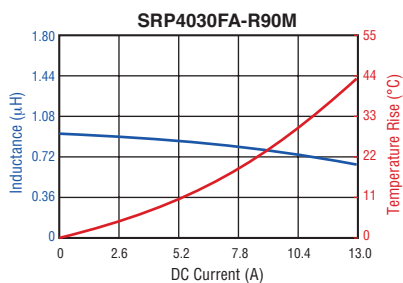
Specifications are subject to change without notice.

The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Users should verify actual device performance in their specific applications.

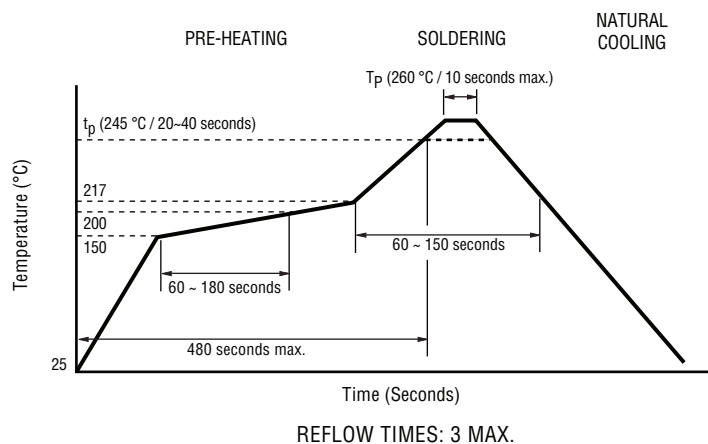
SRP4030FA Series – Shielded Power Inductors



L vs. I Charts



Soldering Profile



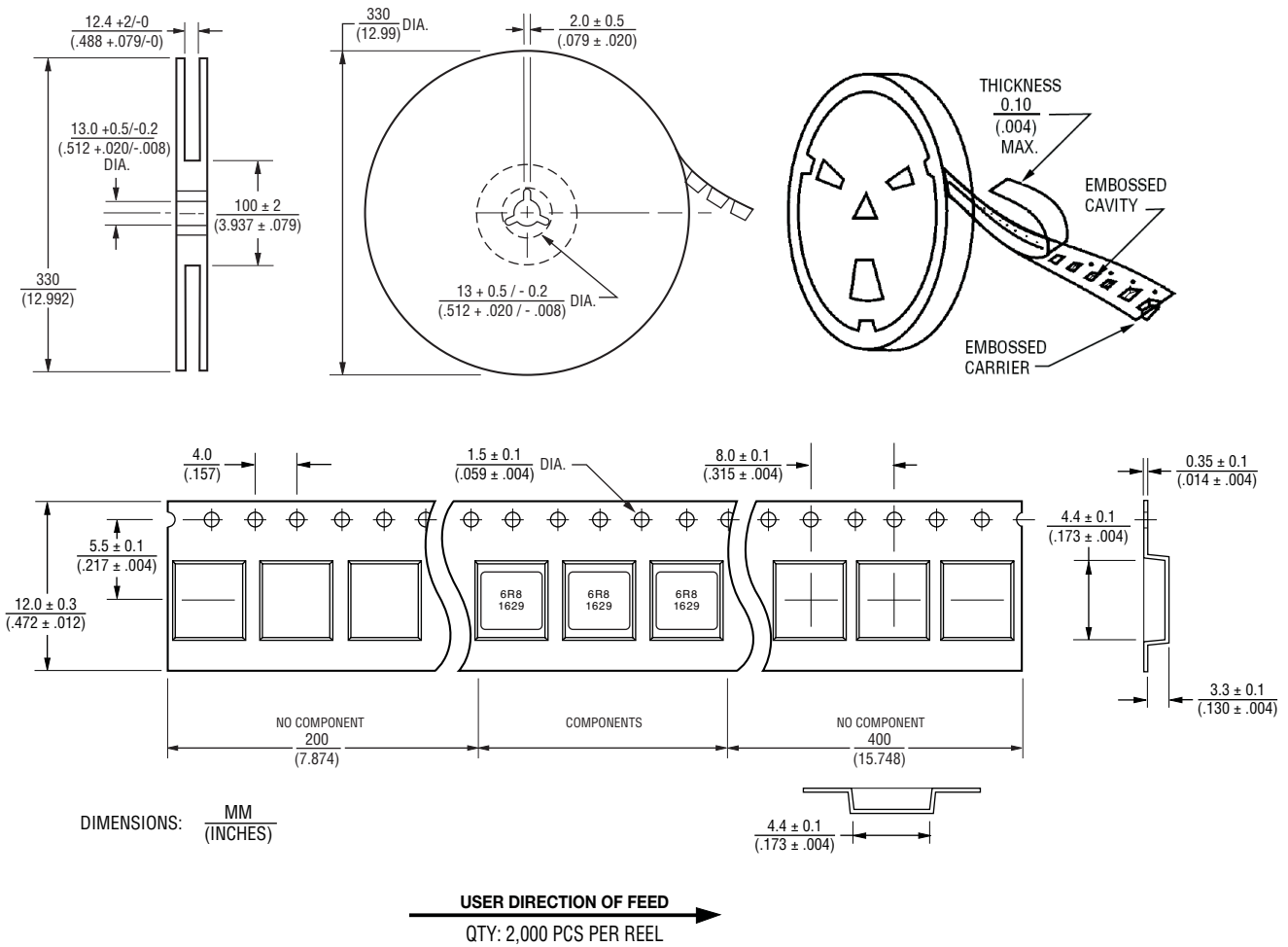
NOTE: 0.12 mm thick solder paste recommended.

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Packaging Specifications



05/18

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