



Features

- Semi-shielded construction
- Inductance range: 0.90 to 100 μ H
- Rated current up to 4.6 A
- RoHS compliant* and halogen free**

Applications

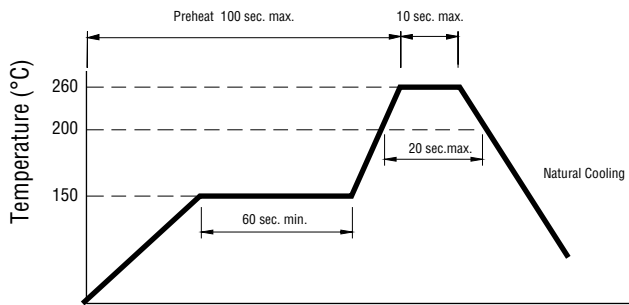
- DC/DC converters
- Notebook computers
- Digital video cameras
- HDDs
- Cellphones
- Televisions, LCD displays

SRN6028 Series - Semi-shielded Power Inductors

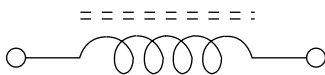
Electrical Specifications @ 25 °C

| Bourns Part No. | Inductance @ 100 KHz / 1 V | | Q (Ref.) | Test Freq. (MHz) | SRF (MHz) Typ. | DCR (Ω) Max. | I _{rms} (A) | I _{sat} (A) |
|-----------------|-------------------------------|--------|-------------|------------------------|----------------------|-----------------------------|-------------------------|-------------------------|
| | L (μ H) | Tol. % | | | | | | |
| SRN6028-R90Y | 0.90 | 30 | 12 | 7.96 | 105 | 0.017 | 4.6 | 6.7 |
| SRN6028-1R5Y | 1.5 | 30 | 12 | 7.96 | 70 | 0.021 | 4.2 | 5.1 |
| SRN6028-2R2Y | 2.2 | 30 | 12 | 7.96 | 56 | 0.026 | 3.7 | 4.2 |
| SRN6028-3R0Y | 3.0 | 30 | 12 | 7.96 | 46 | 0.03 | 3.4 | 3.6 |
| SRN6028-3R3M | 3.3 | 20 | 12 | 7.96 | 42 | 0.034 | 3.4 | 3.6 |
| SRN6028-3R9M | 3.9 | 20 | 10 | 7.96 | 35 | 0.038 | 3.0 | 2.7 |
| SRN6028-4R7M | 4.7 | 20 | 10 | 7.96 | 34 | 0.038 | 3.0 | 2.7 |
| SRN6028-6R0M | 6.0 | 20 | 10 | 7.96 | 28 | 0.048 | 2.5 | 2.5 |
| SRN6028-6R2M | 6.2 | 20 | 10 | 7.96 | 28 | 0.063 | 2.2 | 2.2 |
| SRN6028-6R8M | 6.8 | 20 | 10 | 7.96 | 27 | 0.063 | 2.2 | 2.2 |
| SRN6028-100M | 10 | 20 | 18 | 2.52 | 20 | 0.078 | 1.9 | 1.9 |
| SRN6028-150M | 15 | 20 | 14 | 2.52 | 17 | 0.114 | 1.8 | 1.6 |
| SRN6028-220M | 22 | 20 | 18 | 2.52 | 14 | 0.162 | 1.4 | 1.3 |
| SRN6028-330M | 33 | 20 | 11 | 2.52 | 10 | 0.264 | 1.1 | 1.1 |
| SRN6028-470M | 47 | 20 | 11 | 2.52 | 9 | 0.36 | 0.92 | 1.0 |
| SRN6028-680M | 68 | 20 | 11 | 2.52 | 7 | 0.51 | 0.77 | 0.8 |
| SRN6028-101M | 100 | 20 | 16 | 0.796 | 6 | 0.72 | 0.66 | 0.65 |

Soldering Profile



Electrical Schematic



How to Order

Model SRN6028 - 4R7M
 Value Code (see table) _____

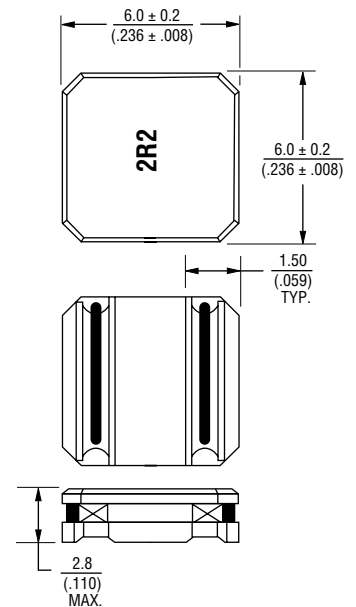
General Specifications

Operating Temperature -40 °C to +125 °C
 (Temperature rise included)
 Storage Temperature -10 °C to +40 °C
 Resistance to Solder Heat
 +260 °C for 10 sec.
 Temperature Rise 40 °C at rated I_{rms}
 Rated Current
 Inductance drops 30 % at I_{sat}

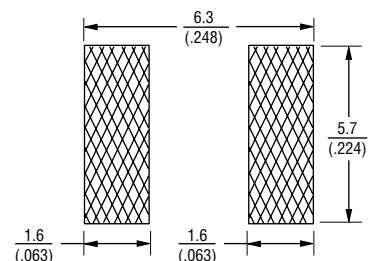
Materials

Core Ferrite
 Wire Enameled copper
 Terminal Finish Sn
 Coating Magnetic epoxy resin
 Packaging 1000 pcs. per 13-inch reel

Product Dimensions



Recommended Layout



DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

**Bourns follows the prevailing definition of "halogen free" in the industry. 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.

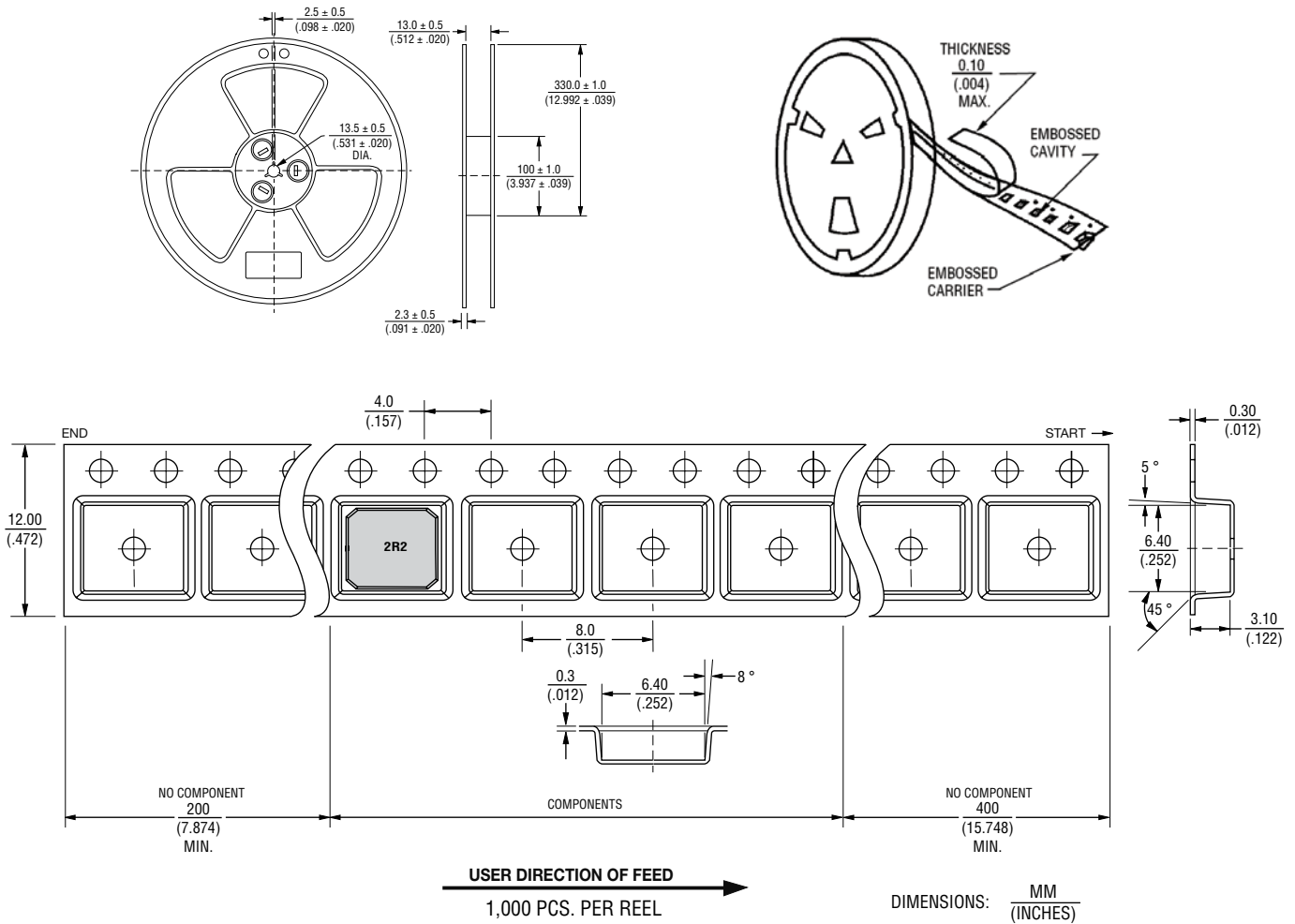
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.

Users should verify actual device performance in their specific applications.

SRN6028 Series - Semi-shielded Power Inductors

BOURNS®

Packaging Specifications



BOURNS®

Asia-Pacific: Tel: +886-2 2562-4117 • Email: asiacus@bourns.com

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

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

www.bourns.com

REV. 11/16

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.