



**THE DATASHEET OF
SRR5028-390Y**





Features

- Height of 3.0 mm max.
- Current rating up to 3.0 A
- RoHS compliant*

Applications

- Input/output of DC/DC converters
- Power supplies for:
 - Portable communication equipment
 - Camcorders
 - LCD TVs

SRR5028 Series - Shielded SMD Power Inductors

Electrical Characteristics

| Bourns Part Number | Inductance 100 kHz | | Q Ref. | Test Frequency (MHz) | SRF Typ. (MHz) | DCR Max. (mΩ) | I rms (A) | I sat (A) |
|--------------------|--------------------|--------|--------|----------------------|----------------|---------------|-----------|-----------|
| | (μH) | Tol. % | | | | | | |
| SRR5028-2R6Y | 2.6 | ±30 | 7 | 7.96 | 77 | 30 | 3.00 | 2.70 |
| SRR5028-3R0Y | 3.0 | ±30 | 7 | 7.96 | 65 | 30 | 2.80 | 2.50 |
| SRR5028-4R2Y | 4.2 | ±30 | 7 | 7.96 | 51 | 35 | 2.50 | 2.20 |
| SRR5028-5R3Y | 5.3 | ±30 | 7 | 7.96 | 45 | 40 | 2.30 | 1.90 |
| SRR5028-6R2Y | 6.2 | ±30 | 7 | 7.96 | 39 | 45 | 2.20 | 1.80 |
| SRR5028-8R2Y | 8.2 | ±30 | 7 | 7.96 | 34 | 55 | 2.10 | 1.60 |
| SRR5028-100Y | 10 | ±30 | 9 | 2.52 | 30 | 70 | 1.50 | 1.40 |
| SRR5028-120Y | 12 | ±30 | 11 | 2.52 | 28 | 80 | 1.46 | 1.25 |
| SRR5028-150Y | 15 | ±30 | 9 | 2.52 | 22 | 100 | 1.37 | 1.15 |
| SRR5028-180Y | 18 | ±30 | 10 | 2.52 | 20 | 110 | 1.25 | 1.10 |
| SRR5028-220Y | 22 | ±30 | 7 | 2.52 | 20 | 120 | 1.15 | 1.00 |
| SRR5028-270Y | 27 | ±30 | 10 | 2.52 | 17 | 160 | 1.05 | 0.90 |
| SRR5028-330Y | 33 | ±30 | 11 | 2.52 | 13 | 190 | 0.90 | 0.78 |
| SRR5028-390Y | 39 | ±30 | 8 | 2.52 | 13 | 210 | 0.86 | 0.72 |
| SRR5028-470Y | 47 | ±30 | 7 | 2.52 | 13 | 250 | 0.82 | 0.65 |
| SRR5028-560Y | 56 | ±30 | 9 | 2.52 | 12 | 300 | 0.72 | 0.60 |
| SRR5028-680Y | 68 | ±30 | 8 | 2.52 | 11 | 350 | 0.62 | 0.56 |
| SRR5028-820Y | 82 | ±30 | 8 | 2.52 | 9 | 430 | 0.52 | 0.50 |
| SRR5028-101Y | 100 | ±30 | 8 | 0.796 | 8 | 480 | 0.45 | 0.45 |
| SRR5028-151Y | 150 | ±30 | 7 | 0.796 | 7.5 | 900 | 0.33 | 0.35 |
| SRR5028-181Y | 180 | ±30 | 11 | 0.796 | 6.3 | 1000 | 0.32 | 0.31 |
| SRR5028-221Y | 220 | ±30 | 7 | 0.796 | 6.5 | 1250 | 0.30 | 0.30 |
| SRR5028-331Y | 330 | ±30 | 8 | 0.796 | 5 | 2000 | 0.20 | 0.20 |
| SRR5028-471Y | 470 | ±30 | 12 | 0.796 | 5 | 2500 | 0.30 | 0.23 |
| SRR5028-561Y | 560 | ±30 | 12 | 0.796 | 4 | 3920 | 0.14 | 0.14 |
| SRR5028-681Y | 680 | ±30 | 11 | 0.796 | 3 | 4300 | 0.13 | 0.14 |

Soldering Profile



WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011. Specifications are subject to change without notice. Users should verify actual device performance in their specific applications. The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at www.bourns.com/docs/legal/disclaimer.pdf

General Specifications

Test Voltage 0.1 V
 Reflow Soldering ... 230 °C, 50 sec. max.
 Operating Temp. -40 °C to +125 °C
 (Temperature rise included)
 Storage Temperature.. -40 °C to +125 °C
 Resistance to Soldering Heat
 260 °C for 10 sec.
 Moisture Sensitivity Level..... 1
 ESD Classification (HBM)..... N/A

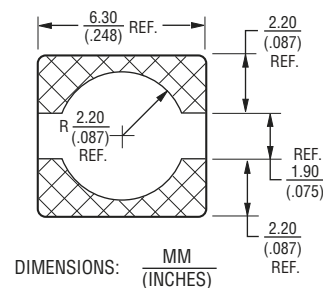
Materials

Core Ferrite
 Wire Enameled copper
 Adhesive..... Epoxy resin
 Terminal..... Ag/Ni/Sn
 Rated Current
 Ind. drop 35 % typ. at Isat
 Temperature Rise..... 30 °C typ.
 at rated Irms
 Packaging..... 400 pcs. per reel

Product Dimensions



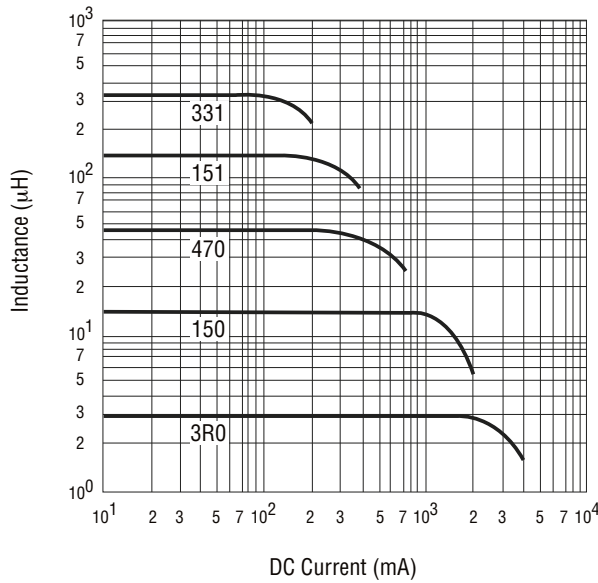
Recommended Layout



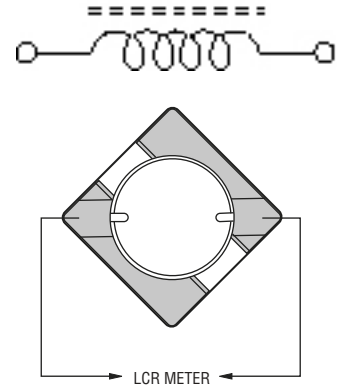
SRR5028 Series - Shielded SMD Power Inductors

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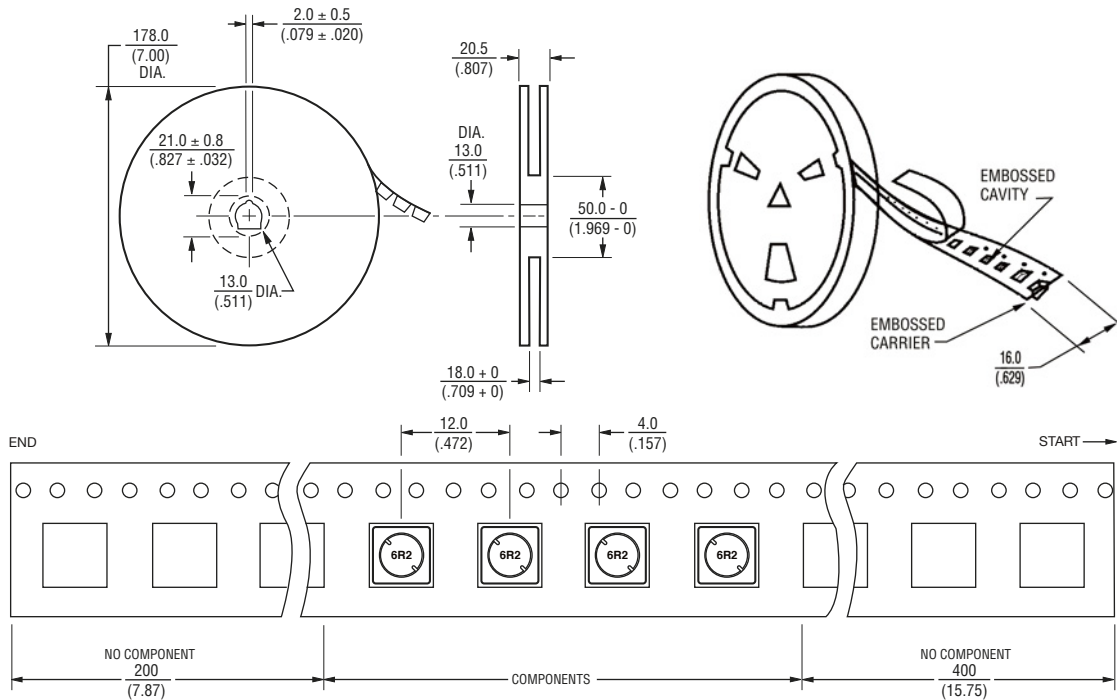
Inductance vs. Current



Electrical Schematic



Packaging Specifications



USER DIRECTION OF FEED
 QTY: 400 PCS. PER REEL

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

REV. 05/18

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Users should verify actual device performance in their specific applications.

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