



**THE DATASHEET OF
SRR5018-120Y**





Features

- Height of 2.0 mm max.
- Current rating up to 3 A
- RoHS compliant*

Applications

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

SRR5018 Series - Shielded Power Inductors

Electrical Specifications

| Bourns Part No. | Inductance 100 KHz | | Q Ref. | Test Frequency (MHz) | SRF Typ. (MHz) | DCR Max. (mΩ) | I rms (A) | I sat (A) |
|-----------------|--------------------|----------|--------|----------------------|----------------|---------------|-----------|-----------|
| | uH | Tol. (%) | | | | | | |
| SRR5018-1R2Y | 1.2 | ±30 | 9.2 | 7.96 | 118 | 30 | 3.00 | 3.50 |
| SRR5018-1R8Y | 1.8 | ±30 | 8.9 | 7.96 | 93 | 35 | 2.60 | 3.00 |
| SRR5018-2R5Y | 2.5 | ±30 | 8.6 | 7.96 | 74 | 40 | 2.40 | 2.70 |
| SRR5018-3R0Y | 3.0 | ±30 | 8.3 | 7.96 | 79 | 45 | 2.20 | 2.40 |
| SRR5018-3R9Y | 3.9 | ±30 | 8 | 7.96 | 64 | 55 | 2.00 | 2.10 |
| SRR5018-4R1Y | 4.1 | ±30 | 8 | 7.96 | 60 | 55 | 2.00 | 2.10 |
| SRR5018-5R0Y | 5.0 | ±30 | 7.9 | 7.96 | 55 | 60 | 1.65 | 1.80 |
| SRR5018-5R4Y | 5.4 | ±30 | 7.4 | 7.96 | 58 | 76 | 1.65 | 1.65 |
| SRR5018-6R2Y | 6.2 | ±30 | 7.5 | 7.96 | 51 | 80 | 1.45 | 1.60 |
| SRR5018-7R5Y | 7.5 | ±30 | 7.9 | 7.96 | 42 | 90 | 1.35 | 1.50 |
| SRR5018-8R9Y | 8.9 | ±30 | 7.3 | 7.96 | 40 | 116 | 1.25 | 1.25 |
| SRR5018-9R0Y | 9.0 | ±30 | 7.2 | 7.96 | 37 | 110 | 1.25 | 1.35 |
| SRR5018-100Y | 10 | ±30 | 11 | 2.52 | 41 | 130 | 1.10 | 1.25 |
| SRR5018-120Y | 12 | ±30 | 8.6 | 2.52 | 39 | 160 | 1.00 | 1.15 |
| SRR5018-150Y | 15 | ±30 | 12.7 | 2.52 | 32 | 190 | 0.95 | 1.10 |
| SRR5018-180Y | 18 | ±30 | 8.8 | 2.52 | 29 | 210 | 0.90 | 1.00 |
| SRR5018-220Y | 22 | ±30 | 14.7 | 2.52 | 22 | 280 | 0.80 | 0.90 |
| SRR5018-270Y | 27 | ±30 | 10.2 | 2.52 | 21 | 320 | 0.75 | 0.80 |
| SRR5018-330Y | 33 | ±30 | 10.9 | 2.52 | 20 | 350 | 0.65 | 0.70 |
| SRR5018-390Y | 39 | ±30 | 10.6 | 2.52 | 17 | 500 | 0.55 | 0.65 |
| SRR5018-470Y | 47 | ±30 | 8.9 | 2.52 | 14 | 550 | 0.52 | 0.60 |
| SRR5018-560Y | 56 | ±30 | 8.9 | 2.52 | 13 | 600 | 0.48 | 0.55 |
| SRR5018-680Y | 68 | ±30 | 9.9 | 2.52 | 12 | 850 | 0.40 | 0.50 |
| SRR5018-820Y | 82 | ±30 | 9.1 | 2.52 | 11 | 950 | 0.38 | 0.45 |
| SRR5018-101Y | 100 | ±30 | 13.1 | 0.796 | 10 | 1100 | 0.35 | 0.42 |
| SRR5018-121Y | 120 | ±30 | 12.9 | 0.796 | 11 | 1420 | 0.30 | 0.40 |
| SRR5018-151Y | 150 | ±30 | 11.8 | 0.796 | 11 | 1650 | 0.28 | 0.35 |
| SRR5018-181Y | 180 | ±30 | 13.6 | 0.796 | 10 | 2300 | 0.25 | 0.32 |
| SRR5018-221Y | 220 | ±30 | 8.7 | 0.796 | 8 | 2500 | 0.23 | 0.30 |

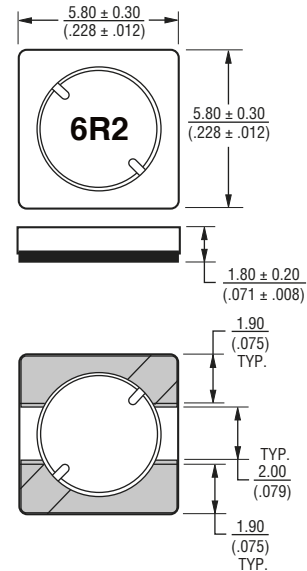
General Specifications

Test Voltage 0.1 V, 100 KHz
 Reflow Soldering .. 230 °C, 50 sec. max.
 Operating Temperature -40 °C to +125 °C
 (Temperature rise included)
 Storage Temperature .. -40 °C to +125 °C
 Resistance to Soldering Heat 260 °C, 10 sec.
 Moisture Sensitivity Level 1
 ESD Classification (HBM)..... N/A

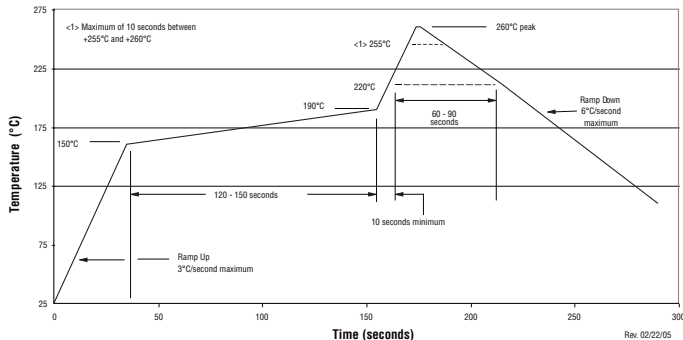
Materials

Core Ferrite
 Wire Enameled copper
 Adhesive Epoxy resin
 Terminal Ag/Ni/Sn
 Rated Current Ind. drop of 35 % typ. at Isat
 Temp. Rise 40 °C typ. at rated Irms
 Packaging 500 pcs. per reel

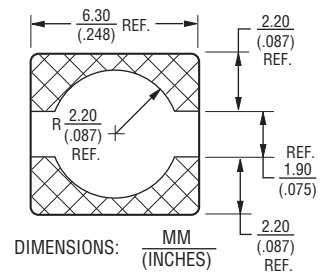
Product Dimensions



Soldering Profile



Recommended Layout



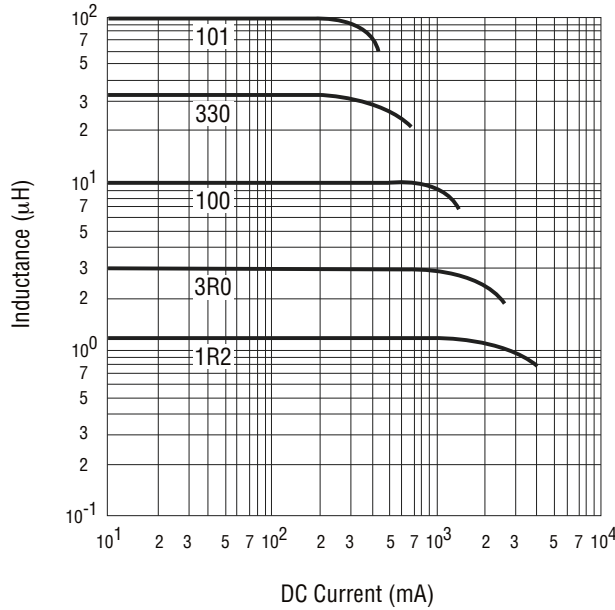
WARNING Cancer and Reproductive Harm
www.P65Warnings.ca.gov

*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.

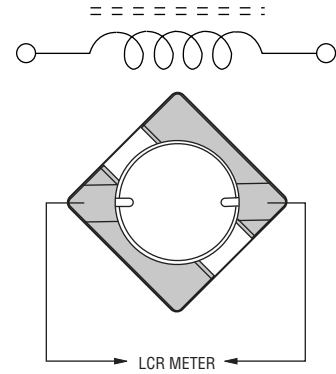
SRR5018 Series - Shielded Power Inductors

BOURNS®

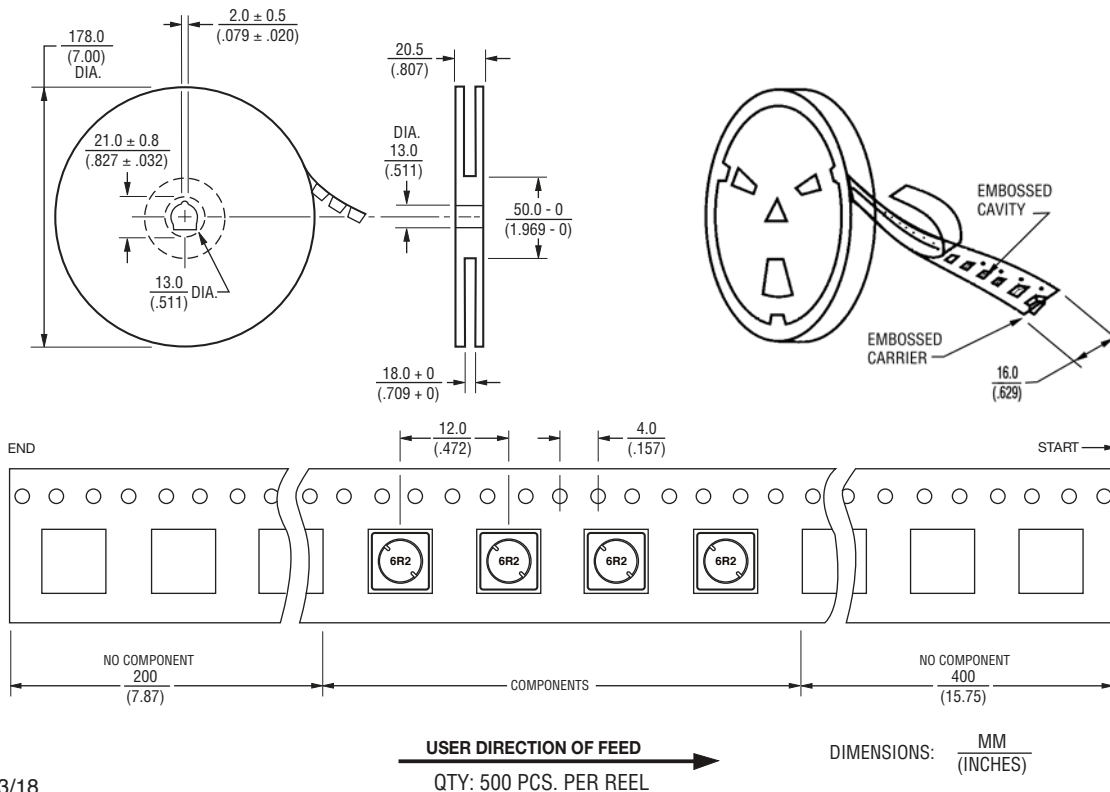
Inductance vs. Current



Electrical Schematic



Packaging Specifications



REV. 03/18

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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