



Features

- Available in E12 series
- Unit height of 6.8 mm
- Current up to 8 A Isat
- RoHS compliant*

Applications

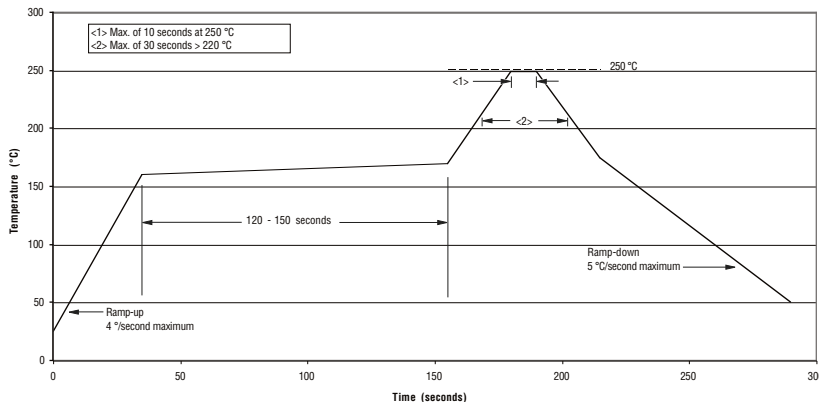
- Input/output of DC/DC converters
- Power supplies for:
 - Portable communication equipment
 - Camcorders
 - LCD TVs

SRR1806 Series - Shielded Power Inductors

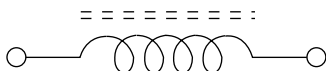
Electrical Characteristics

| Bourns Part Number | Inductance 100 kHz | | Q Ref. | Test Frequency (MHz) | SRF Typ. (MHz) | RDC ±20 % (Ω) | I rms Max. (A) | I sat Typ. (A) |
|--------------------|--------------------|--------|--------|----------------------|----------------|---------------|----------------|----------------|
| | (μH) | Tol. % | | | | | | |
| SRR1806-100M | 10.0 | ± 20 | 56 | 2.52 | 19.0 | 0.033 | 4.00 | 8.20 |
| SRR1806-150M | 15.0 | ± 20 | 53 | 2.52 | 17.5 | 0.039 | 3.60 | 7.20 |
| SRR1806-220M | 22.0 | ± 20 | 51 | 2.52 | 16.0 | 0.053 | 3.00 | 6.20 |
| SRR1806-330M | 33.0 | ± 20 | 44 | 2.52 | 10.0 | 0.083 | 2.50 | 5.00 |
| SRR1806-470M | 47.0 | ± 20 | 40 | 2.52 | 8.0 | 0.110 | 2.00 | 4.20 |
| SRR1806-680M | 68.0 | ± 20 | 37 | 2.52 | 6.0 | 0.170 | 1.60 | 3.40 |
| SRR1806-101M | 100.0 | ± 20 | 40 | 0.796 | 4.6 | 0.270 | 1.30 | 2.60 |
| SRR1806-151M | 150.0 | ± 20 | 39 | 0.796 | 4.3 | 0.400 | 1.05 | 2.30 |
| SRR1806-221M | 220.0 | ± 20 | 29 | 0.796 | 3.5 | 0.510 | 1.00 | 1.90 |
| SRR1806-331M | 330.0 | ± 20 | 30 | 0.796 | 3.0 | 0.790 | 0.80 | 1.40 |
| SRR1806-471M | 470.0 | ± 20 | 27 | 0.796 | 2.4 | 1.000 | 0.64 | 1.30 |
| SRR1806-681M | 680.0 | ± 20 | 19 | 0.796 | 2.1 | 1.470 | 0.54 | 1.10 |
| SRR1806-102M | 1000.0 | ± 20 | 46 | 0.796 | 1.5 | 2.160 | 0.45 | 0.90 |

Soldering Profile



Schematic



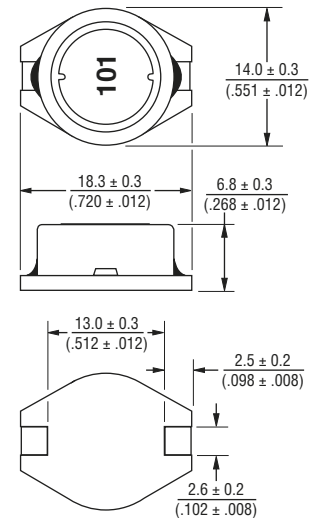
General Specifications

Test Voltage 0.1 V
 Reflow soldering.....250 °C; 10 sec max.
 (In compliance with JEDEC, J-STD-020C, Table 4-2)
 Operating Temperature -40 °C to +125 °C
 (Temperature rise included)
 Storage Temperature -45 °C to +125 °C
 Resistance to Soldering Heat250 °C, 10 sec. max.
 Moisture Sensitivity Level..... 1
 ESD Classification (HBM)..... N/A

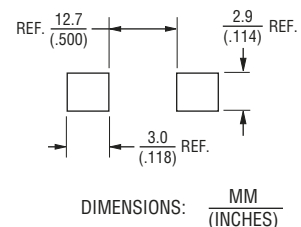
Materials

Core..... Ferrite core
 Wire Enameled copper
 Base LCP E4008
 Terminal..... Cu/Ni/Sn
 Rated Current/Ind. drop 10 % typ. at Isat
 Temperature Rise 40 °C max. at rated Irms
 Packaging..... 250 pcs. per reel

Product Dimensions



Recommended Layout



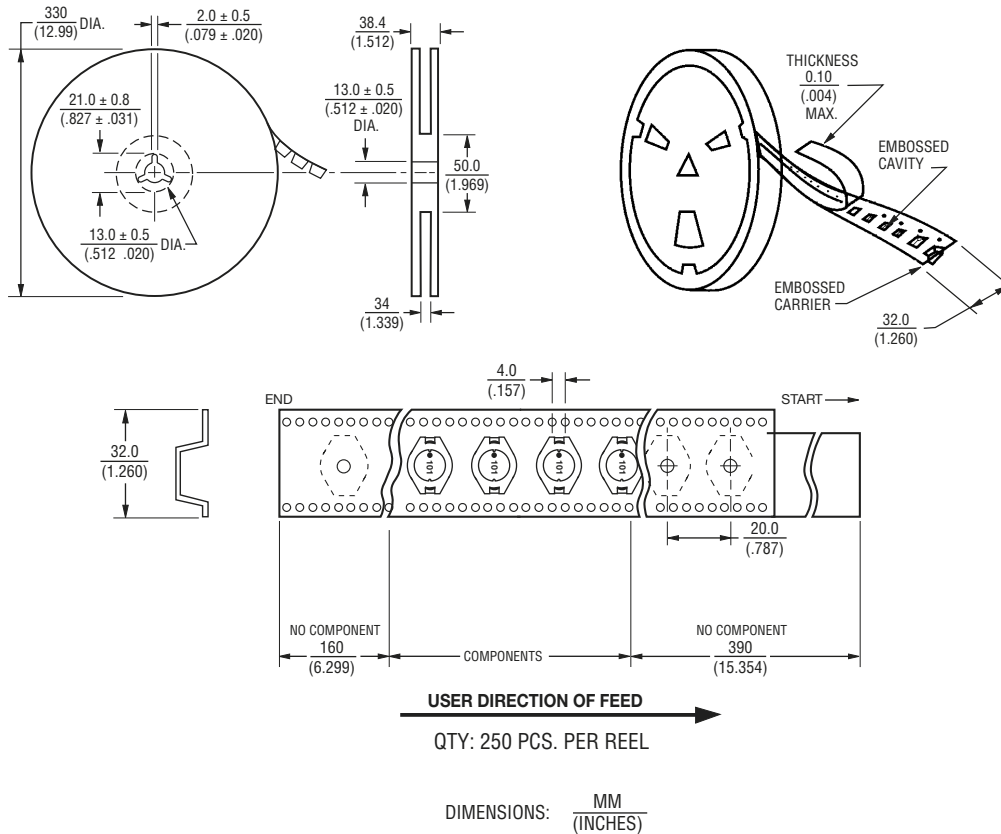
WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

*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

SRR1806 Series - Shielded Power Inductors

BOURNS®

Packaging Specifications



REV. 03/18

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