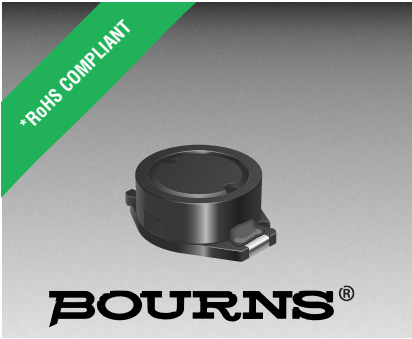




**THE DATASHEET OF
SRR0805-470Y**





Features

- Available in E12 series
- Low profile - 4.7 mm unit height
- High current
- RoHS compliant*

Applications

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

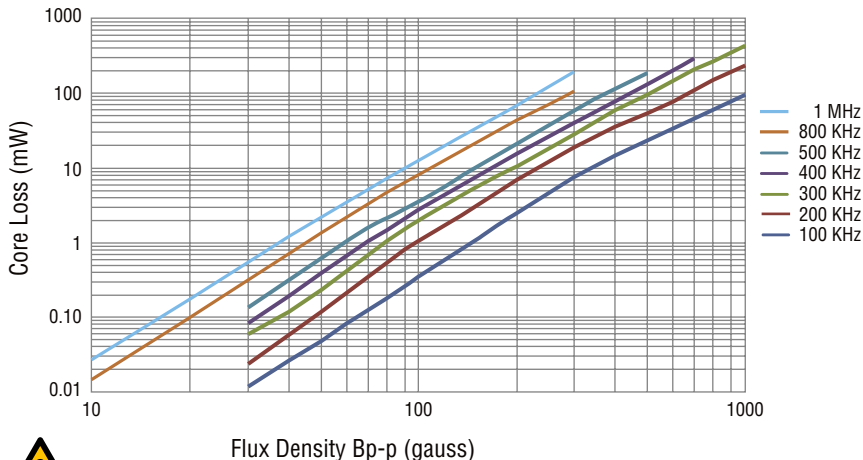
SRR0805 Series - Shielded Power Inductors

Electrical Specifications

| Bourns Part No. | Inductance 1 KHz | | Q Ref. | Test Frequency (MHz) | SRF Min. (MHz) | RDC Max. (Ω) | I rms Max. (A) | I sat Typ. (A) | **K- Factor |
|-----------------|---------------------|--------|-----------|----------------------------|----------------------|--------------------|----------------------|----------------------|----------------|
| | μH | Tol. % | | | | | | | |
| SRR0805-2R2M | 2.2 | ± 20 | 18 | 7.96M | 75.0 | 0.040 | 2.50 | 4.90 | 202 |
| SRR0805-3R9M | 3.9 | ± 20 | 20 | 7.96M | 50.0 | 0.055 | 2.10 | 3.70 | 159 |
| SRR0805-5R6M | 5.6 | ± 20 | 20 | 7.96M | 40.0 | 0.065 | 1.95 | 3.20 | 132 |
| SRR0805-8R2M | 8.2 | ± 20 | 19 | 7.96M | 32.0 | 0.080 | 1.75 | 2.50 | 104 |
| SRR0805-100M | 10 | ± 20 | 40 | 2.52M | 28.0 | 0.100 | 1.50 | 2.20 | 92 |
| SRR0805-120M | 12 | ± 20 | 40 | 2.52M | 24.0 | 0.120 | 1.40 | 2.10 | 87 |
| SRR0805-150M | 15 | ± 20 | 40 | 2.52M | 22.0 | 0.140 | 1.30 | 1.80 | 78 |
| SRR0805-180Y | 18 | ± 15 | 40 | 2.52M | 19.0 | 0.160 | 1.20 | 1.70 | 70 |
| SRR0805-220Y | 22 | ± 15 | 38 | 2.52M | 19.0 | 0.180 | 1.10 | 1.50 | 62 |
| SRR0805-270Y | 27 | ± 15 | 35 | 2.52M | 15.5 | 0.200 | 1.00 | 1.40 | 57 |
| SRR0805-330Y | 33 | ± 15 | 40 | 2.52M | 13.5 | 0.240 | 0.92 | 1.20 | 51 |
| SRR0805-390Y | 39 | ± 15 | 35 | 2.52M | 12.0 | 0.260 | 0.84 | 1.10 | 48 |
| SRR0805-470Y | 47 | ± 15 | 32 | 2.52M | 10.5 | 0.280 | 0.75 | 1.00 | 43 |
| SRR0805-560K | 56 | ± 10 | 30 | 2.52M | 9.5 | 0.380 | 0.68 | 0.95 | 40 |
| SRR0805-680K | 68 | ± 10 | 28 | 2.52M | 9.0 | 0.440 | 0.60 | 0.90 | 36 |
| SRR0805-820K | 82 | ± 10 | 28 | 2.52M | 8.5 | 0.550 | 0.54 | 0.74 | 33 |
| SRR0805-101K | 100 | ± 10 | 45 | 0.796M | 7.5 | 0.600 | 0.50 | 0.70 | 30 |
| SRR0805-121K | 120 | ± 10 | 42 | 0.796M | 7.0 | 0.750 | 0.45 | 0.66 | 27 |
| SRR0805-151K | 150 | ± 10 | 39 | 0.796M | 6.5 | 0.90 | 0.40 | 0.64 | 24 |
| SRR0805-181K | 180 | ± 10 | 41 | 0.796M | 4.8 | 1.05 | 0.35 | 0.62 | 22 |
| SRR0805-221K | 220 | ± 10 | 38 | 0.796M | 4.5 | 1.18 | 0.30 | 0.55 | 20 |
| SRR0805-271K | 270 | ± 10 | 37 | 0.796M | 4.2 | 1.40 | 0.27 | 0.45 | 18 |
| SRR0805-331K | 330 | ± 10 | 36 | 0.796M | 3.8 | 1.80 | 0.24 | 0.38 | 17 |
| SRR0805-471K | 470 | ± 10 | 34 | 0.796M | 3.5 | 2.25 | 0.20 | 0.35 | 14 |
| SRR0805-561K | 560 | ± 10 | 32 | 0.796M | 3.0 | 3.00 | 0.18 | 0.34 | 12 |
| SRR0805-681K | 680 | ± 10 | 32 | 0.796M | 2.8 | 3.40 | 0.17 | 0.32 | 11 |
| SRR0805-821K | 820 | ± 10 | 35 | 0.796M | 2.5 | 4.00 | 0.16 | 0.29 | 10 |
| SRR0805-102K | 1000 | ± 10 | 35 | 0.252M | 2.2 | 5.00 | 0.15 | 0.24 | 9 |

**K-Factor: To calculate core flux density, B_p -p (gauss) = $K \times L(\mu H) \times \Delta I$ (peak-to-peak ripple current, A), determine core loss from *Core Loss vs. Flux Density* plot.

Core Loss vs. Flux Density



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

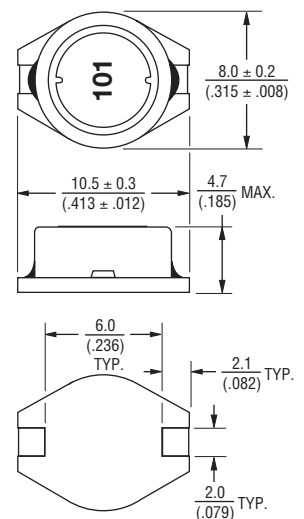
General Specifications

Test Voltage 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 .. -40 °C to +125 °C
 Resistance to Soldering Heat
 260 °C, 10 sec. max.
 Moisture Sensitivity Level 1
 ESD Classification (HBM) N/A

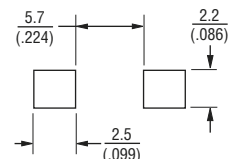
Materials

Core Ferrite DR & RI
 Wire Enameled copper
 Base LCP E4008
 Terminal Cu/Ni/Sn
 Rated Current
 Ind. drop of 10 % typ. at Isat
 Temperature Rise
 40 °C max. at rated I rms
 Packaging 1000 pcs. per reel

Product Dimensions



Recommended Layout

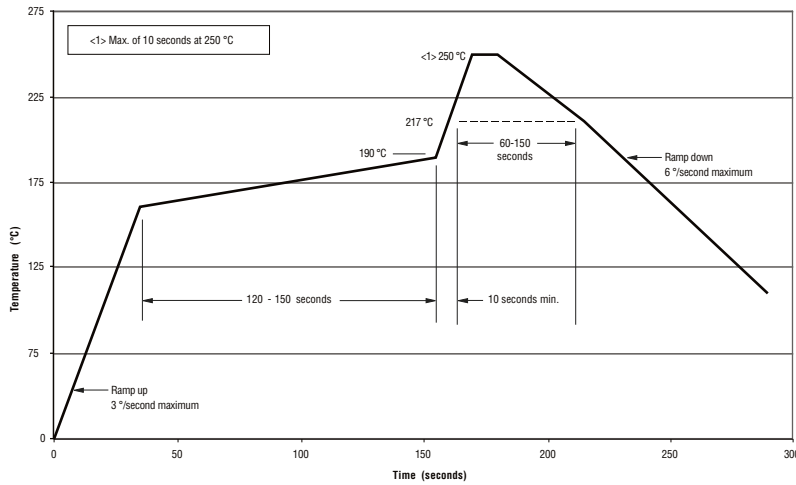


DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

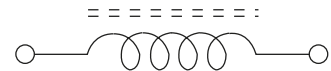
SRR0805 Series - Shielded Power Inductors

BOURNS®

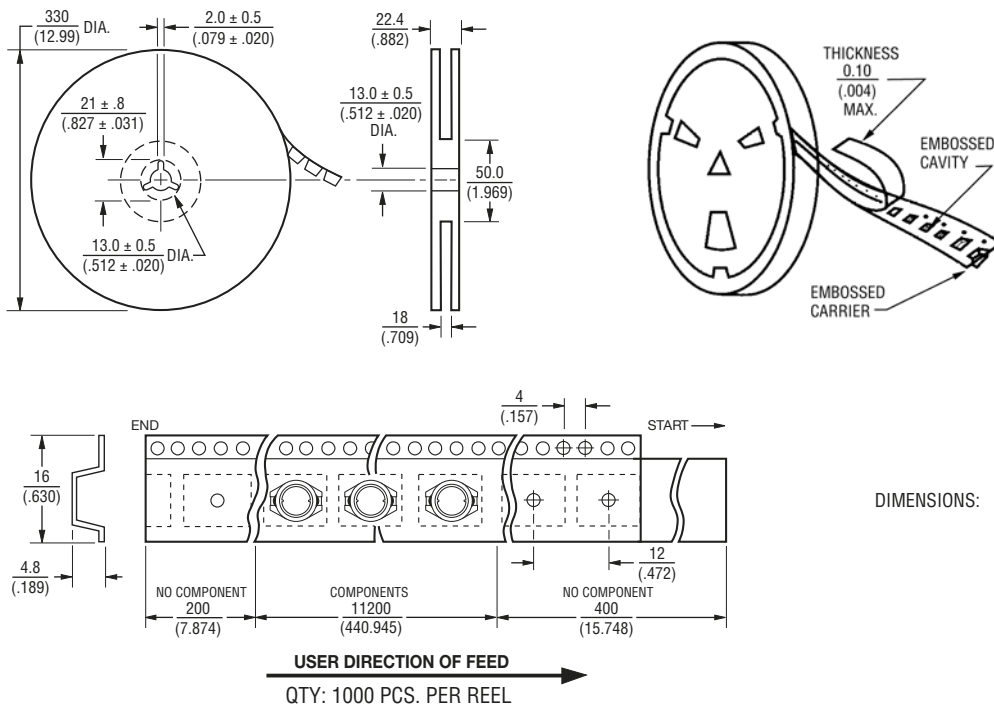
Soldering Profile



Schematic



Packaging Specifications



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

REV. 03/18

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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