



Features

- Available in E12 series
- Unit height of 5.2 mm
- Current up to 4.5 A
- Lead free
- RoHS compliant*

Applications

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

SRR1005 Series - Shielded Power Inductors

Electrical Specifications

| Bourns Part No. | Inductance 1kHz | | Q Ref. | Test Frequency (MHz) | SRF Min. (MHz) | RDC (Ω) | I rms Max. (A) | I sat Typ. (A) |
|-----------------|-----------------|--------|--------|----------------------|----------------|---------|----------------|----------------|
| | (μH) | Tol. % | | | | | | |
| SRR1005-1R0M | 1.0 | ± 20 | 25 | 7.96M | 120 | 0.017 | 4.50 | 8.00 |
| SRR1005-1R5M | 1.5 | ± 20 | 25 | 7.96M | 100 | 0.020 | 3.60 | 7.00 |
| SRR1005-2R2M | 2.2 | ± 20 | 25 | 7.96M | 90.0 | 0.027 | 3.10 | 6.10 |
| SRR1005-3R0M | 3.0 | ± 20 | 25 | 7.96M | 80.0 | 0.030 | 2.90 | 5.00 |
| SRR1005-3R3M | 3.3 | ± 20 | 25 | 7.96M | 75.0 | 0.039 | 3.30 | 3.90 |
| SRR1005-4R7M | 4.7 | ± 20 | 25 | 7.96M | 50.0 | 0.040 | 2.50 | 3.80 |
| SRR1005-6R8M | 6.8 | ± 20 | 22 | 7.96M | 35.0 | 0.075 | 2.20 | 2.80 |
| SRR1005-7R0M | 7.0 | ± 20 | 22 | 7.96M | 32.0 | 0.055 | 2.20 | 3.20 |
| SRR1005-100M | 10 | ± 20 | 48 | 2.52M | 30.0 | 0.065 | 2.00 | 3.00 |
| SRR1005-120M | 12 | ± 20 | 45 | 2.52M | 25.0 | 0.080 | 1.80 | 2.30 |
| SRR1005-150M | 15 | ± 20 | 40 | 2.52M | 20.0 | 0.085 | 1.70 | 2.10 |
| SRR1005-180Y | 18 | ± 15 | 35 | 2.52M | 19.0 | 0.090 | 1.60 | 2.10 |
| SRR1005-220Y | 22 | ± 15 | 42 | 2.52M | 18.0 | 0.100 | 1.40 | 1.90 |
| SRR1005-270Y | 27 | ± 15 | 40 | 2.52M | 17.0 | 0.120 | 1.30 | 1.60 |
| SRR1005-330Y | 33 | ± 15 | 40 | 2.52M | 15.0 | 0.160 | 1.20 | 1.56 |
| SRR1005-390Y | 39 | ± 15 | 40 | 2.52M | 13.0 | 0.180 | 1.05 | 1.40 |
| SRR1005-470Y | 47 | ± 15 | 35 | 2.52M | 12.0 | 0.190 | 1.00 | 1.30 |
| SRR1005-560Y | 56 | ± 15 | 35 | 2.52M | 11.0 | 0.210 | 0.90 | 1.10 |
| SRR1005-680Y | 68 | ± 15 | 35 | 2.52M | 9.0 | 0.340 | 0.82 | 1.10 |
| SRR1005-820Y | 82 | ± 15 | 35 | 2.52M | 8.0 | 0.380 | 0.75 | 0.95 |
| SRR1005-101K | 100 | ± 10 | 35 | 0.796M | 7.5 | 0.420 | 0.68 | 0.90 |
| SRR1005-121K | 120 | ± 10 | 30 | 0.796M | 7.2 | 0.460 | 0.60 | 0.80 |
| SRR1005-151K | 150 | ± 10 | 28 | 0.796M | 6.2 | 0.520 | 0.55 | 0.66 |
| SRR1005-181K | 180 | ± 10 | 28 | 0.796M | 5.8 | 0.700 | 0.50 | 0.65 |
| SRR1005-221K | 220 | ± 10 | 30 | 0.796M | 5.2 | 0.800 | 0.45 | 0.63 |
| SRR1005-271K | 270 | ± 10 | 30 | 0.796M | 4.8 | 1.100 | 0.40 | 0.52 |
| SRR1005-331K | 330 | ± 10 | 30 | 0.796M | 4.5 | 1.200 | 0.35 | 0.48 |
| SRR1005-391K | 390 | ± 10 | 25 | 0.796M | 4.2 | 1.400 | 0.33 | 0.45 |
| SRR1005-471K | 470 | ± 15 | 40 | 0.796M | 3.0 | 1.600 | 0.30 | 0.45 |
| SRR1005-561K | 560 | ± 10 | 40 | 0.796M | 2.7 | 1.800 | 0.28 | 0.42 |
| SRR1005-681K | 680 | ± 10 | 37 | 0.796M | 2.6 | 2.300 | 0.26 | 0.38 |
| SRR1005-821K | 820 | ± 10 | 37 | 0.796M | 2.5 | 2.600 | 0.24 | 0.36 |
| SRR1005-102K | 1000 | ± 10 | 65 | 0.252M | 2.0 | 3.200 | 0.22 | 0.32 |
| SRR1005-122K | 1200 | ± 10 | 58 | 0.252M | 2.0 | 3.600 | 0.20 | 0.29 |
| SRR1005-152K | 1500 | ± 10 | 53 | 0.252M | 1.6 | 5.200 | 0.17 | 0.24 |
| SRR1005-182K | 1800 | ± 10 | 65 | 0.252M | 1.4 | 5.700 | 0.16 | 0.23 |
| SRR1005-222K | 2200 | ± 10 | 55 | 0.252M | 1.4 | 6.500 | 0.14 | 0.21 |
| SRR1005-272K | 2700 | ± 10 | 55 | 0.252M | 1.2 | 8.600 | 0.12 | 0.18 |
| SRR1005-332K | 3300 | ± 10 | 50 | 0.252M | 1.2 | 10.00 | 0.10 | 0.17 |

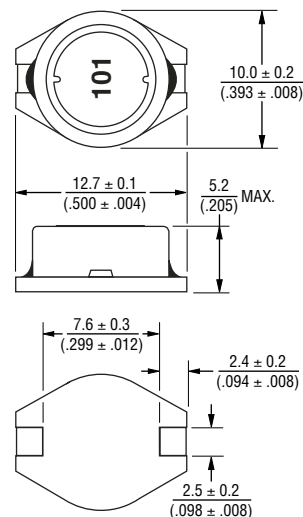
General Specifications

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
250 °C, 10 sec. max.

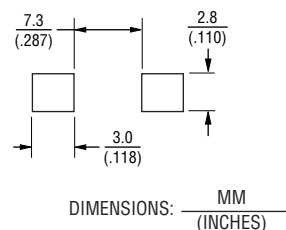
Materials

Core.....Ferrite DR and RI core
 WireEnameled copper
 BaseLCP E4008
 TerminalCu/Ni/Sn
 Rated Current
Ind. drop 10 % typ. at Isat
 Temperature Rise
40 °C max. at rated Irms
 Packaging.....600 pcs. per reel

Product Dimensions



Recommended Layout

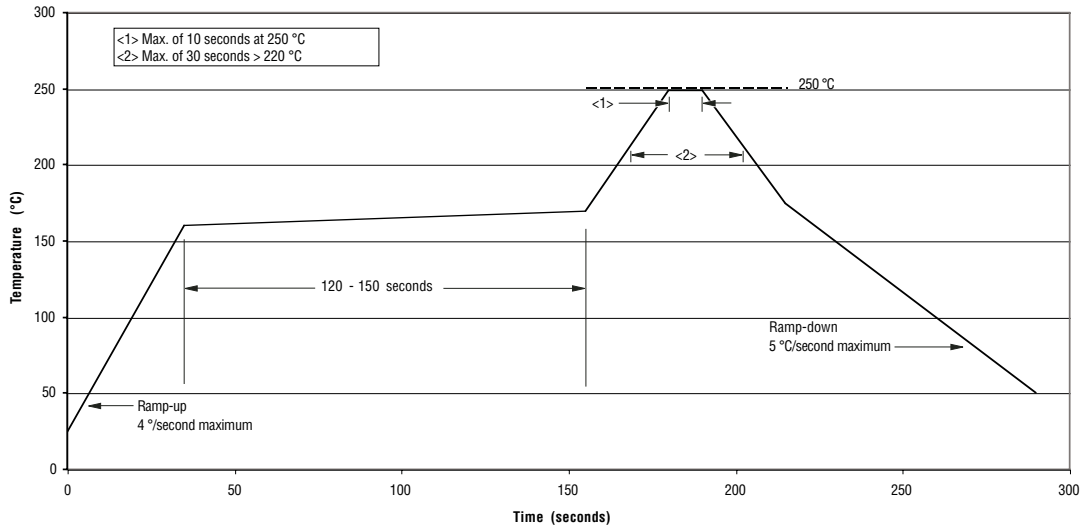


*RoHS Directive 2002/95/EC Jan 27 2003 including Annex
 Specifications are subject to change without notice.
 Customers should verify actual device performance in their specific applications.

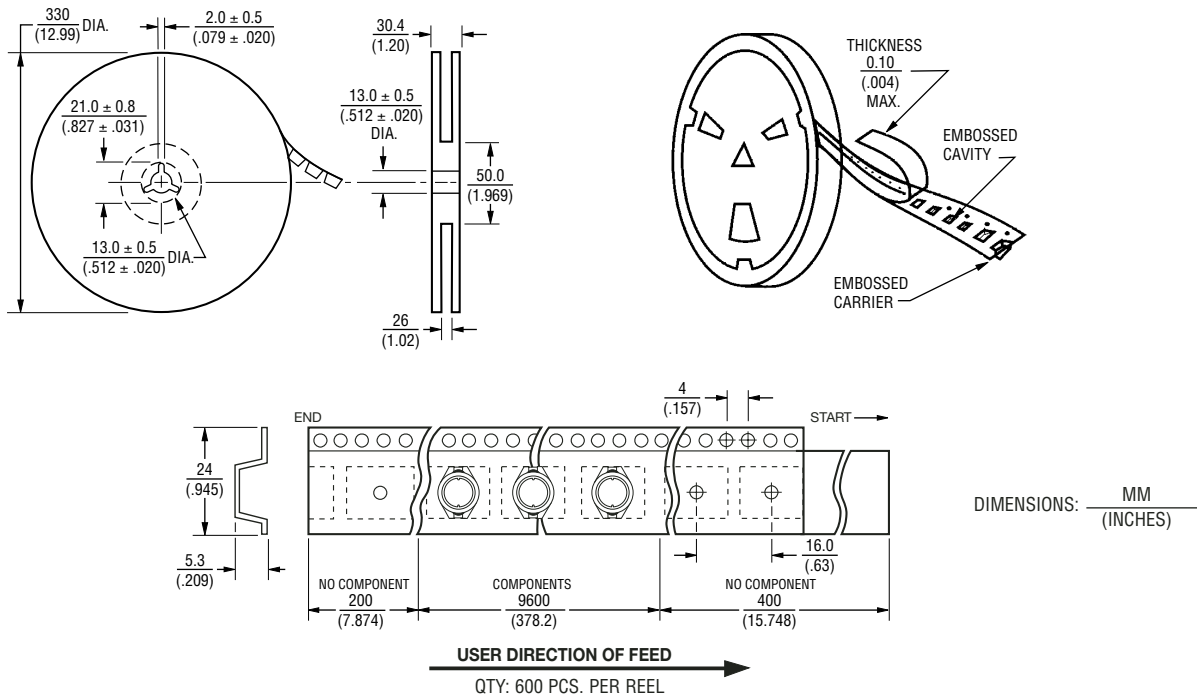
SRR1005 Series - Shielded Power Inductors

BOURNS®

Soldering Profile



Packaging Specifications



REV. 10/08

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