



Features

- Shielded construction
- Unit height of 5.6 mm
- Inductance range: 0.3 μ H to 7.2 μ H
- Current up to 18 A
- RoHS compliant*

Applications

- Input/output of DC/DC converters
- Power supplies for:
 - Portable communications equipment
 - Camcorders
 - LCD TVs
 - Car audio systems

SRP1205 Series - Shielded Power Inductors

Electrical Specifications

| Bourns Part No. | Initial Inductance L0 (μ H) | Inductance at Flat Point L1 (μ H) | Flat Point ref. (A) | SRF typ. (MHz) | I rms (A) | I sat (A) | DCR (m Ω) max. |
|-----------------|----------------------------------|--|---------------------|----------------|-----------|-----------|------------------------|
| SRP1205-R30Y | 0.54 \pm 25 % | 0.30 \pm 25 % | 5.00 | 160 | 18.0 | 35.0 | 1.8 |
| SRP1205-R60Y | 0.85 \pm 25 % | 0.60 \pm 25 % | 5.00 | 95 | 16.0 | 27.0 | 2.5 |
| SRP1205-1R0Y | 1.25 \pm 25 % | 1.00 \pm 25 % | 5.00 | 75 | 14.0 | 22.0 | 3.4 |
| SRP1205-1R8Y | 2.00 \pm 25 % | 1.80 \pm 25 % | 2.00 | 55 | 13.0 | 16.0 | 3.4 |
| SRP1205-2R5Y | 2.70 \pm 25 % | 2.50 \pm 25 % | 2.00 | 40 | 11.5 | 12.0 | 3.4 |
| SRP1205-3R3Y | 3.50 \pm 25 % | 3.30 \pm 25 % | 2.00 | 40 | 11.0 | 11.8 | 5.4 |
| SRP1205-4R0Y | 4.20 \pm 25 % | 4.00 \pm 25 % | 3.00 | 35 | 10.5 | 8.3 | 5.4 |
| SRP1205-5R6Y | 5.80 \pm 25 % | 5.60 \pm 25 % | 2.00 | 30 | 8.5 | 8.0 | 11.4 |
| SRP1205-7R2Y | 7.40 \pm 25 % | 7.20 \pm 25 % | 2.00 | 30 | 8.3 | 7.5 | 13.5 |

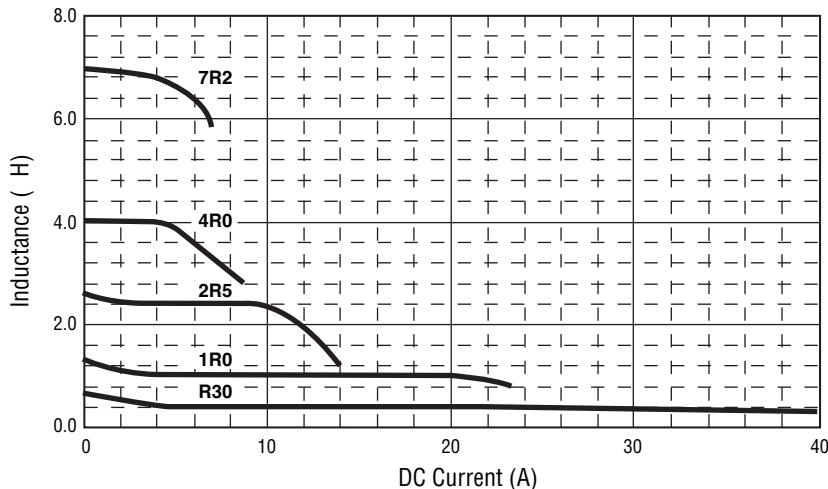
General Specifications

Test Voltage.....1 V
 Test Frequency100 KHz
 Reflow Soldering.....230 °C; 50 sec max.
 Operating Temperature ..-55 °C to +150 °C
 (Temperature rise included)
 Storage Temperature...-55 °C to +150 °C
 Resistance to Soldering Heat
+260 °C for 10 sec.

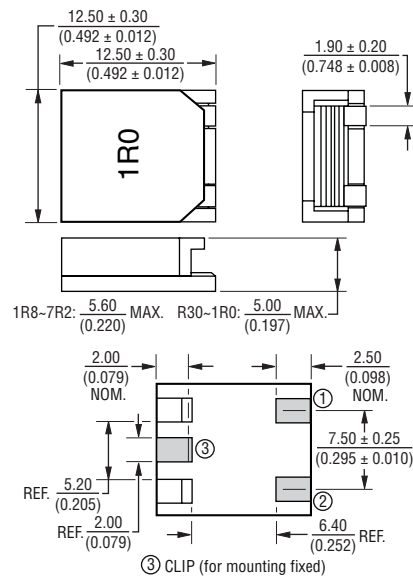
Materials

Core.....Ferrite ER
 Wire.....Enameled copper
 Terminal.....Cu/Ni/Sn
 Rated Current.....Ind. drops 20 % at I sat
 Temperature Rise.....40 °C at rated I rms
 Packaging600 pcs. per 13-inch reel

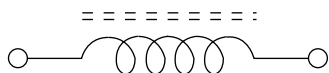
L vs I Charts



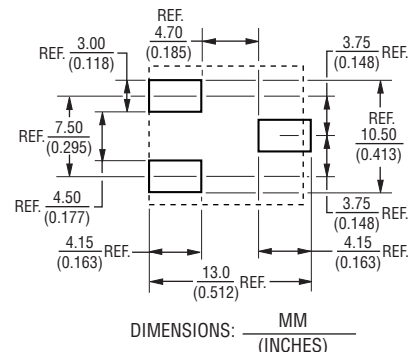
Product Dimensions



Electrical Schematic



Recommended Layout

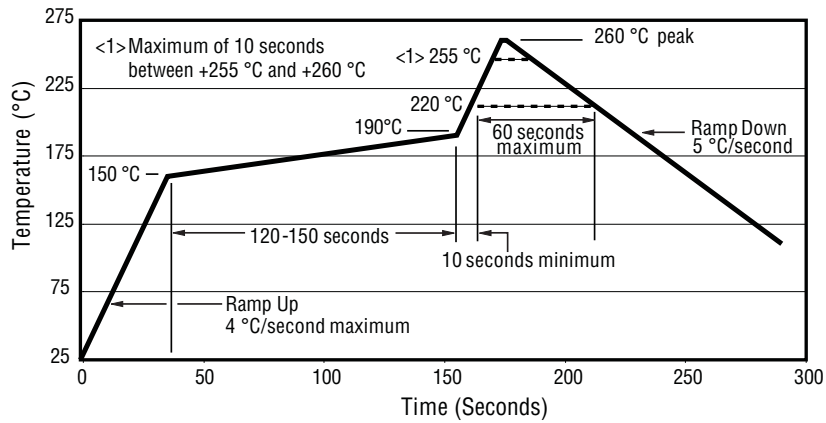


*RoHS Directive 2002/95/EC Jan 27, 2003 including Annex.
 Specifications are subject to change without notice.
 Customers should verify actual device performance in their specific applications.

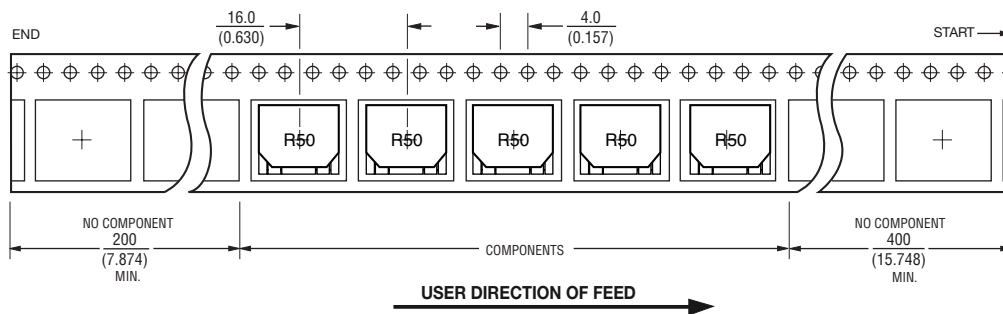
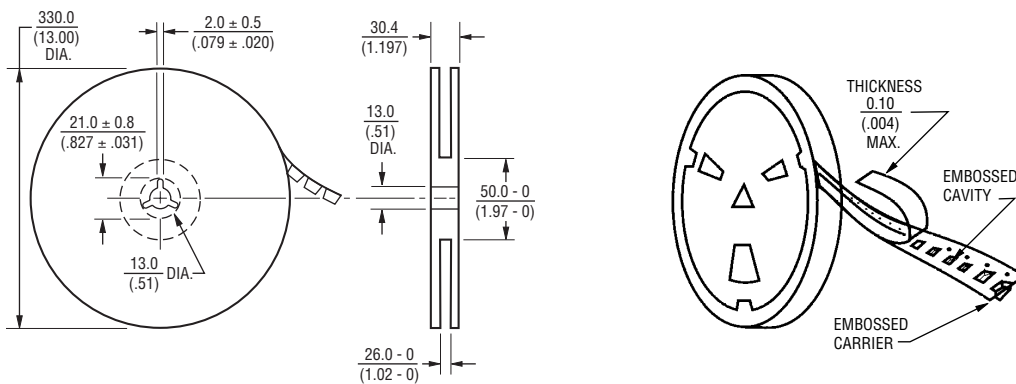
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BOURNS®

Soldering Profile



Packaging Specifications



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