



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

This series is currently available but not recommended for new designs.

SRP1205 Series - Shielded Power Inductors

Electrical Specifications

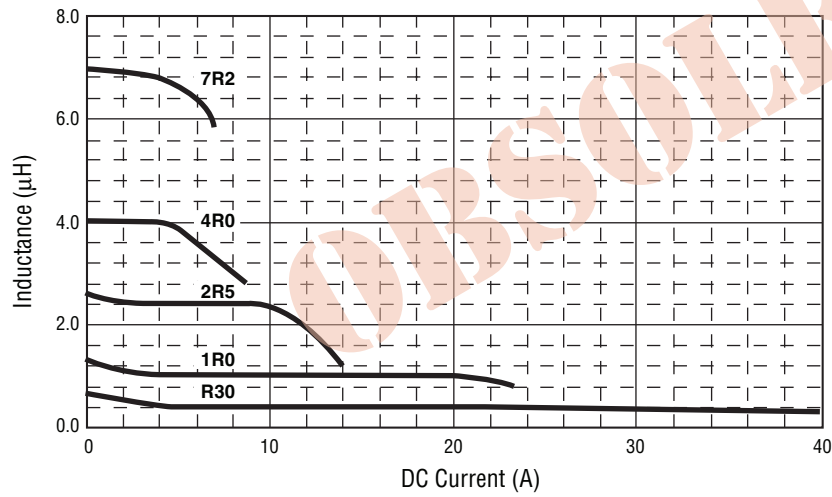
Bourns Part No.	Initial Inductance L0 (μ H)	Inductance at Flat Point L1 (μ H)	Flat Point Ref. (A)	SRF typ. (MHz)	I rms (A)	I sat (A)	DCR (m Ω) Max.
SRP1205-R30Y	0.54 \pm 25 %	0.30 \pm 25 %	5.00	160	18.0	35.0	1.8
SRP1205-R60Y	0.85 \pm 25 %	0.60 \pm 25 %	5.00	95	16.0	27.0	2.5
SRP1205-1R0Y	1.25 \pm 25 %	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 Frequency 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 for 10 sec.
 Moisture Sensitivity Level 1
 ESD Classification (HBM)..... N/A

¹ Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

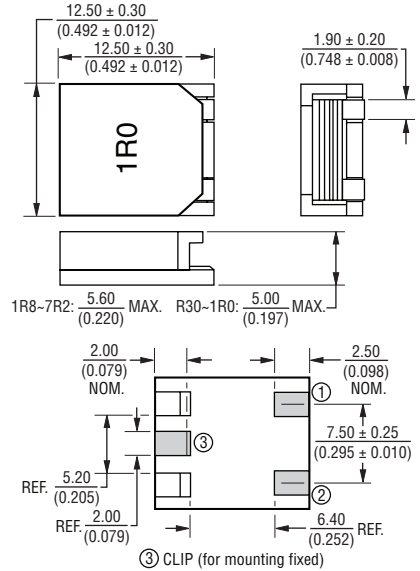
L vs I Charts



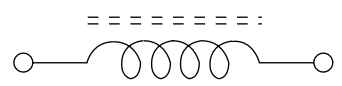
Materials

Core Ferrite ER
 Wire Enameled copper
 Terminal Cu/Ni/Sn
 Rated Current Ind. drops 20 % at Isat
 Temperature Rise 40 °C at rated Irms
 Packaging 600 pcs. per 13-inch reel

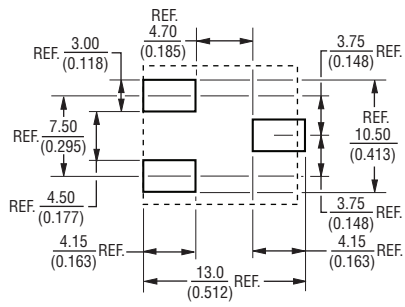
Product Dimensions



Electrical Schematic



Recommended Layout



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

*RoHS Directive 2015/863, Mar 31, 2015 and Annex. 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.

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

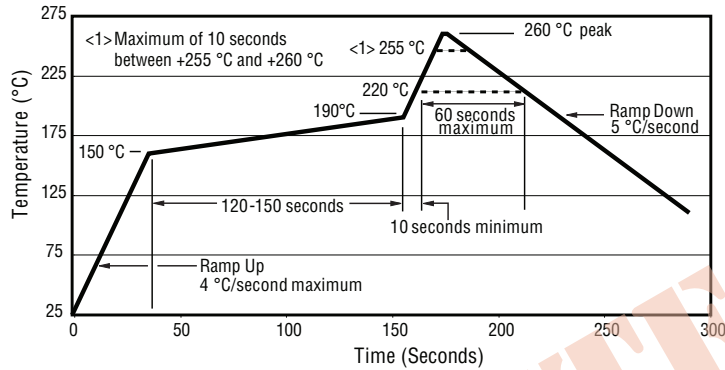
Applications

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

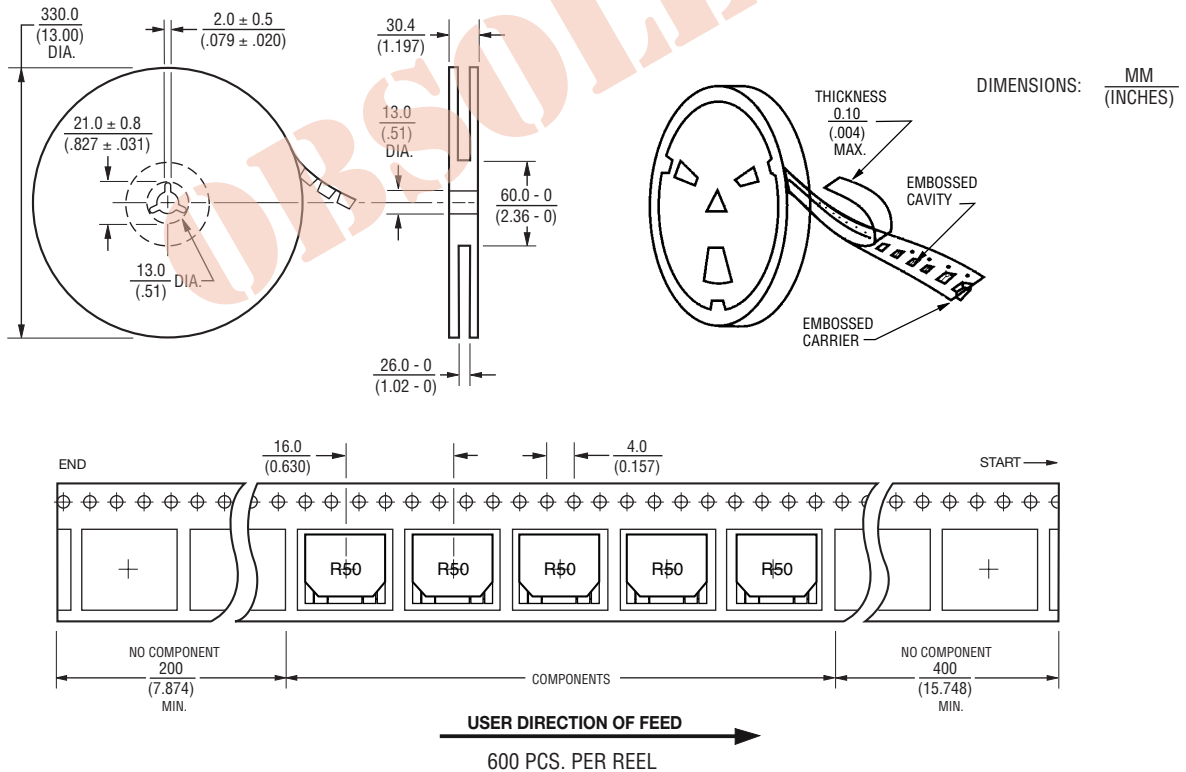
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BOURNS®

Soldering Profile



Packaging Specifications



REV. 03/20

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Users should verify actual device performance in their specific applications.

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