



**THE DATASHEET OF
SRP1205-4R0Y**





- ### 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

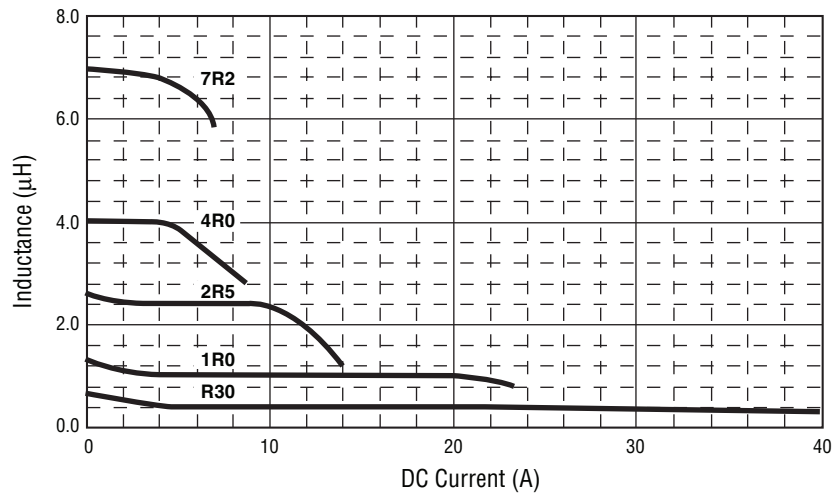
Bourns Part No.	Initial Inductance L0 (μ H)	Inductance at Flat Point L1 (μ H)	Flat Point Ref. (A)	SRF typ. (MHz)	I rms (A)	I sat (A)	DCR (m Ω) Max.
SRP1205-R30Y	0.54 \pm 25 %	0.30 \pm 25 %	5.00	160	18.0	35.0	1.8
SRP1205-R60Y	0.85 \pm 25 %	0.60 \pm 25 %	5.00	95	16.0	27.0	2.5
SRP1205-1R0Y	1.25 \pm 25 %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

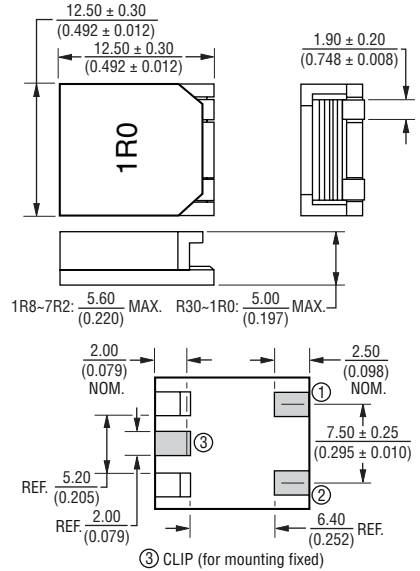
L vs I Charts



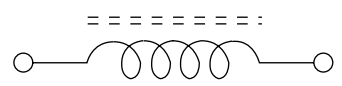
Materials

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

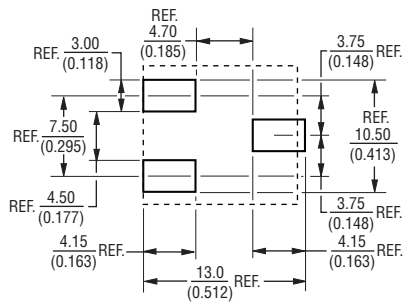
Product Dimensions



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

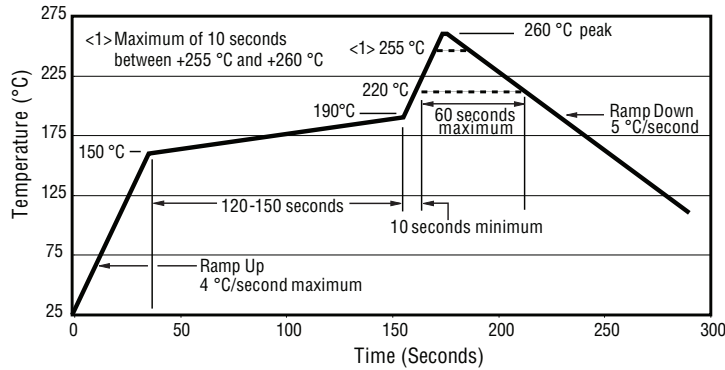
Applications

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

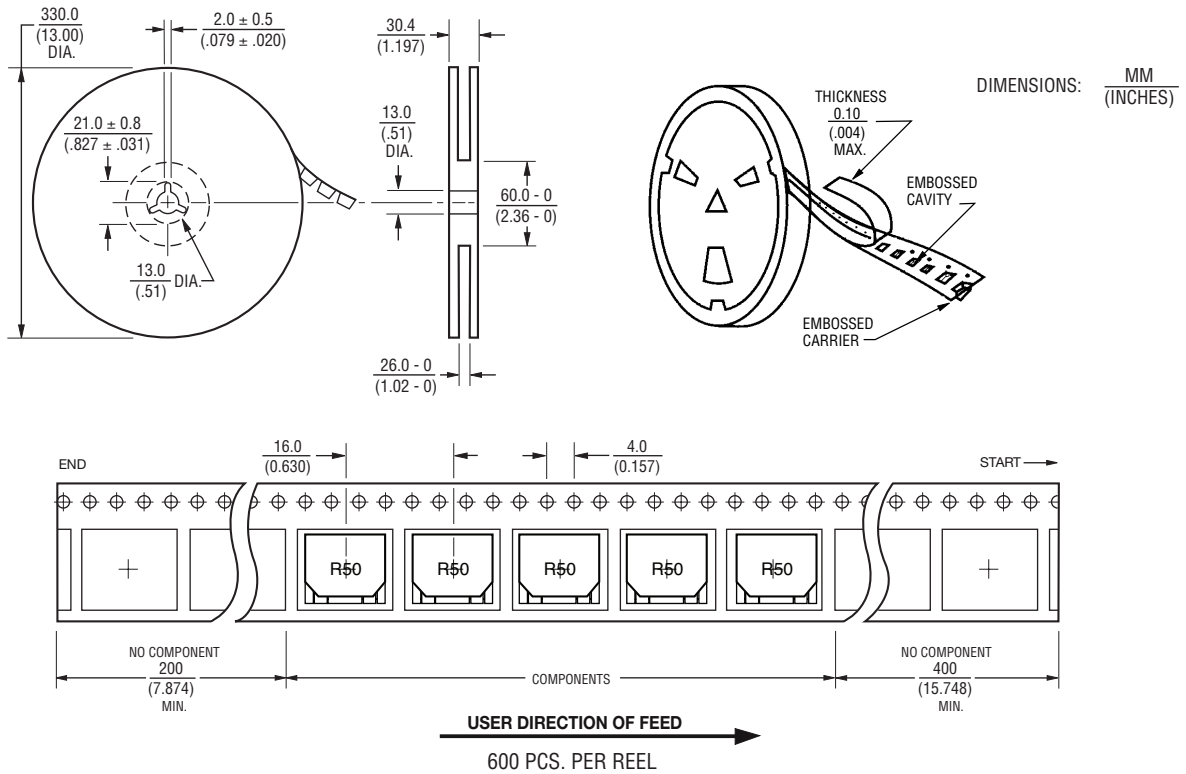
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Soldering Profile



Packaging Specifications



REV. 03/20

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