



THE DATASHEET OF SRP1205-R30Y





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.

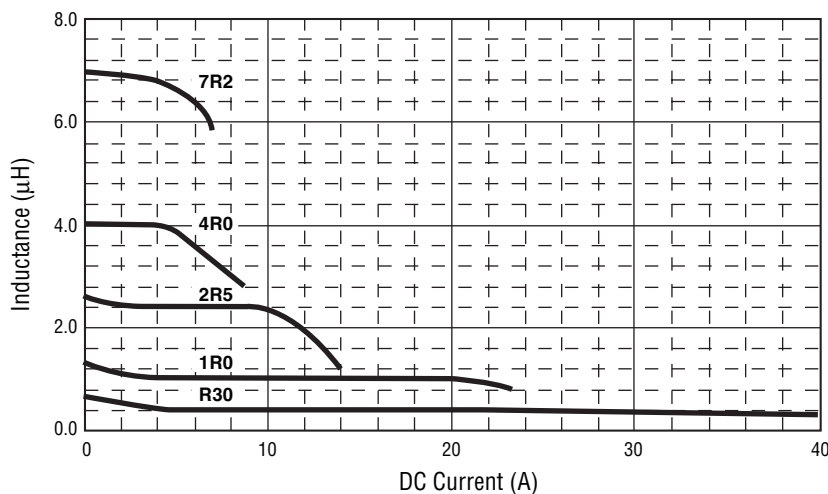
BOURNS®

SRP1205 Series - Shielded Power Inductors

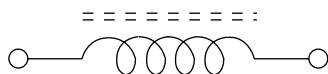
Electrical Specifications

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

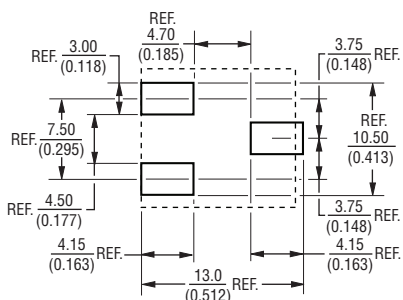
L vs I Charts



Electrical Schematic



Recommended Layout



General Specifications

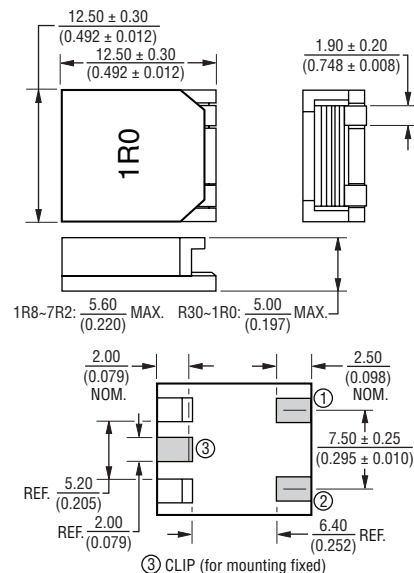
Test Voltage 1 V
 Test Frequency 100 KHz
 Reflow Soldering .. 230 °C; 50 sec. max.
 Operating Temperature
 -40 °C to +125 °C
 (Temperature rise included)
 Storage Temperature
 -40 °C to +125 °C
 Resistance to Soldering Heat
 +260 °C for 10 sec.
 Moisture Sensitivity Level 1
 ESD Classification (HBM) 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.

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



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



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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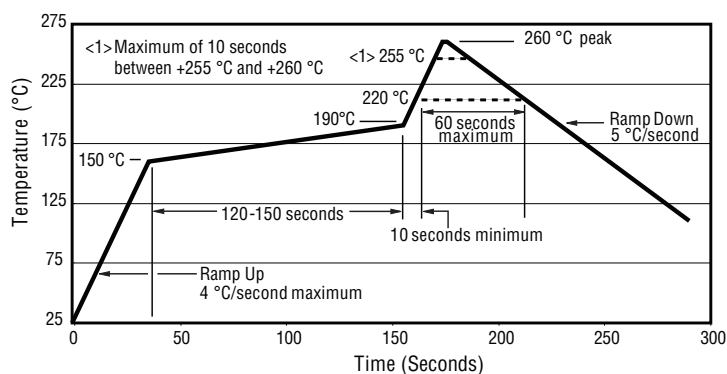
Applications

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

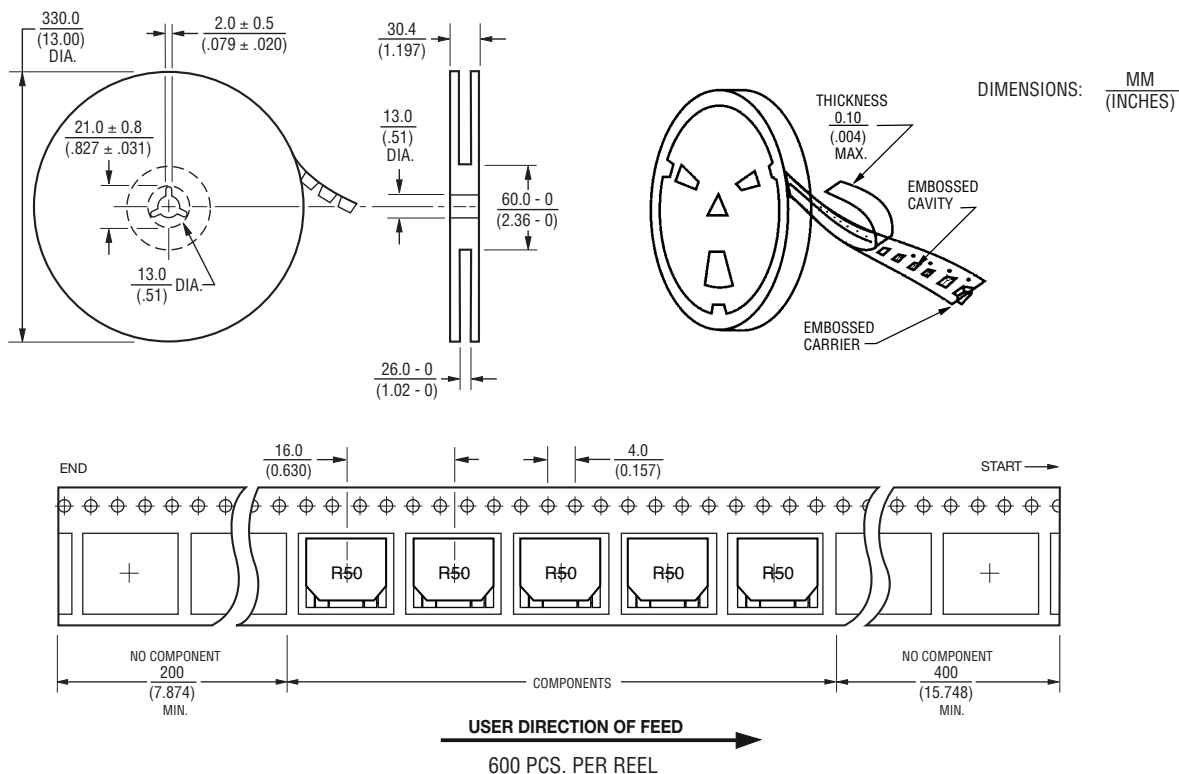
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Soldering Profile



Packaging Specifications



REV. 03/20

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