



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*

Applications

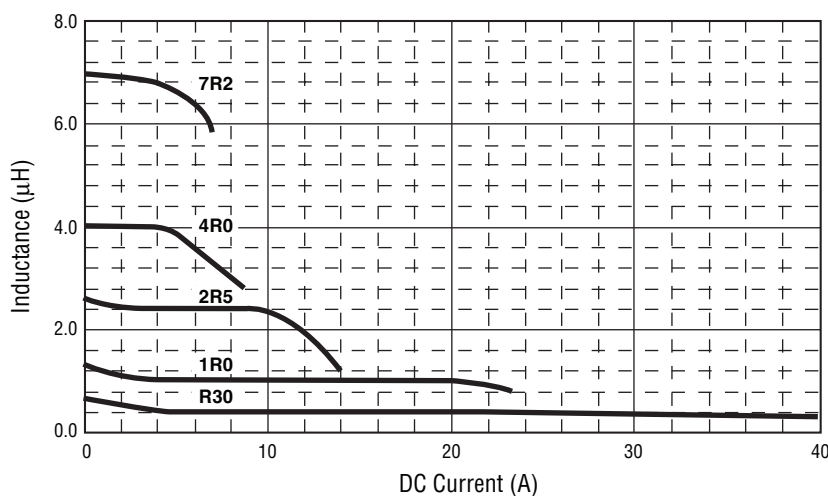
- Input/output of DC/DC converters
- Power supplies for:
 - Portable communications equipment
 - Camcorders
 - LCD TVs
 - Car audio systems

SRP1205 Series - Shielded Power Inductors

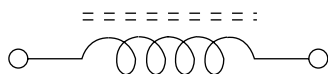
Electrical Specifications

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

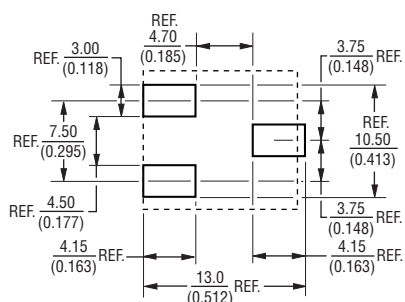
L vs I Charts



Electrical Schematic



Recommended Layout



General Specifications

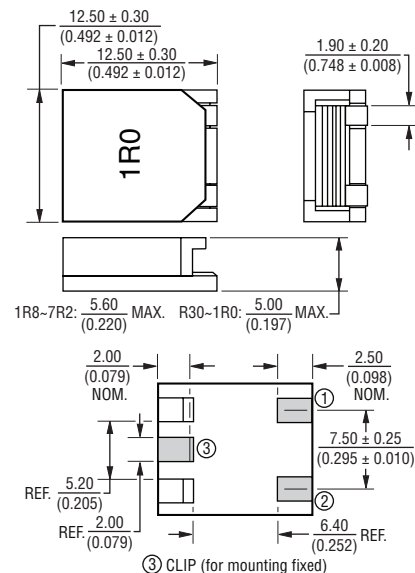
Test Voltage 1 V
 Test Frequency 100 KHz
 Reflow Soldering .. 230 °C; 50 sec. max.
 Operating Temperature
 -40 °C to +125 °C
 (Temperature rise included)
 Storage Temperature
 -40 °C to +125 °C
 Resistance to Soldering Heat
 +260 °C for 10 sec.
 Moisture Sensitivity Level 1
 ESD Classification (HBM)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

*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

Specifications are subject to change without notice.

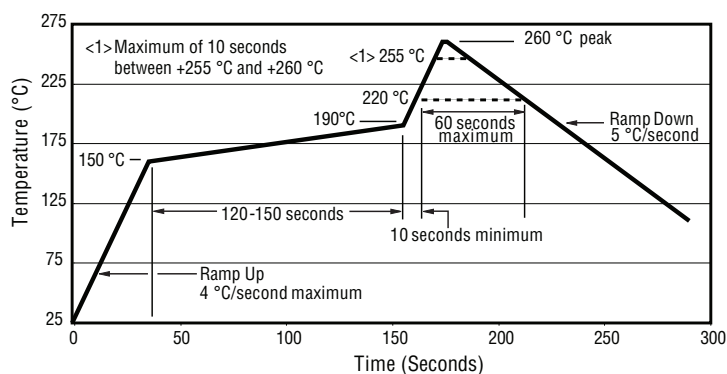
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.

Users should verify actual device performance in their specific applications.

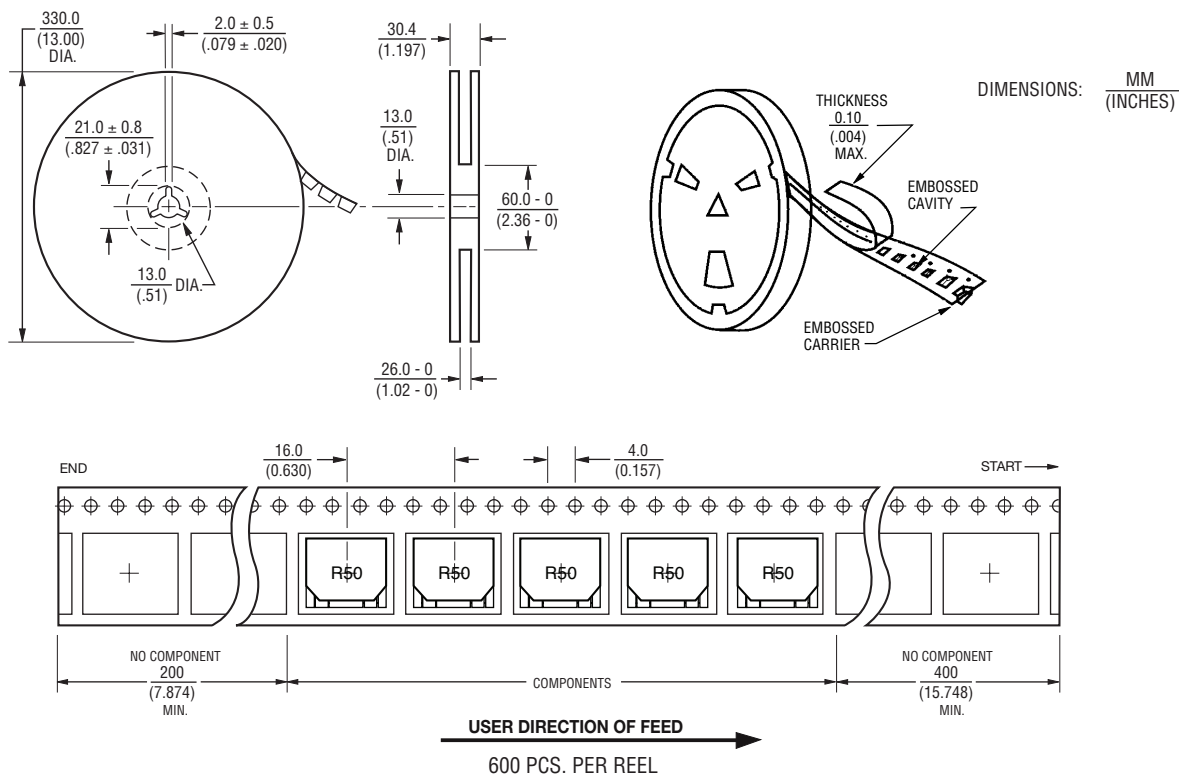
SRP1205 Series - Shielded Power Inductors

BOURNS®

Soldering Profile



Packaging Specifications



REV. 09/17

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