



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

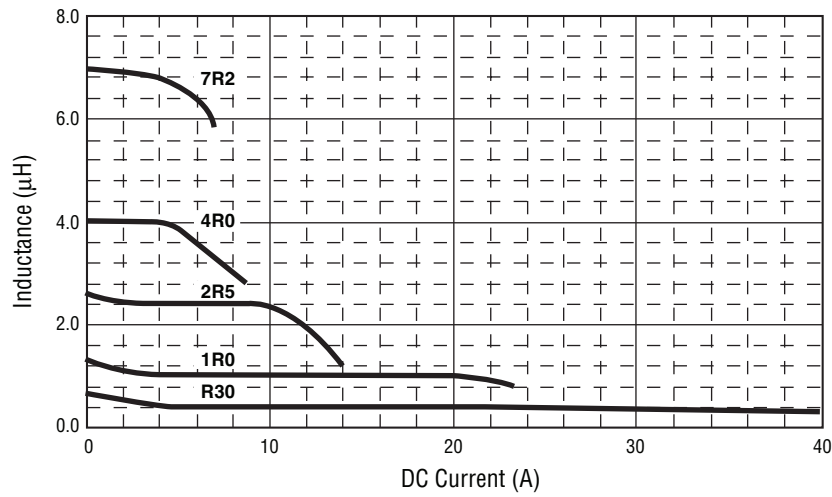
This series is currently available but not recommended for new designs.

## SRP1205 Series - Shielded Power Inductors

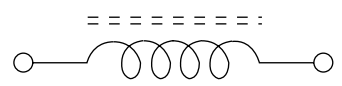
### Electrical Specifications

Bourns Part No.	Initial Inductance L0 ( $\mu$ H)	Inductance at Flat Point L1 ( $\mu$ H)	Flat Point Ref. (A)	SRF typ. (MHz)	I rms (A)	I sat (A)	DCR (m $\Omega$ ) 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

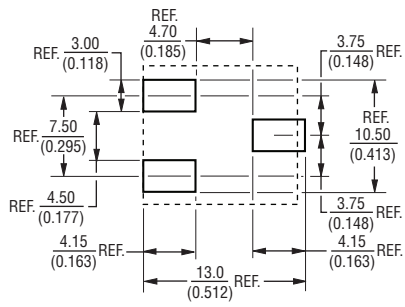
### L vs I Charts



### Electrical Schematic



### Recommended Layout



### General Specifications

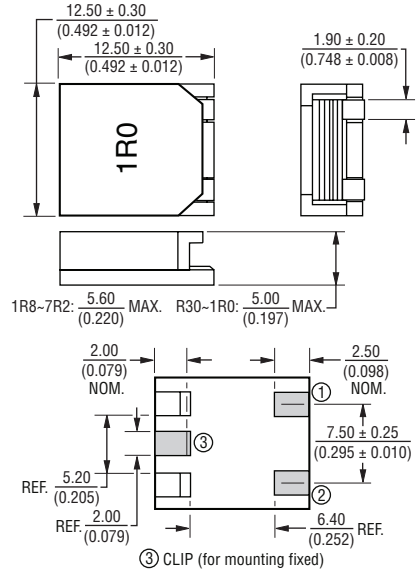
Test Voltage ..... 1 V  
 Test Frequency ..... 100 KHz  
 Reflow Soldering .. 230 °C; 50 sec. max.  
 Operating Temperature  
 ..... -40 °C to +125 °C  
 (Temperature rise included)  
 Storage Temperature  
 ..... -40 °C to +125 °C  
 Resistance to Soldering Heat  
 ..... +260 °C for 10 sec.  
 Moisture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

<sup>1</sup> 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



**WARNING Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://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](http://www.bourns.com/docs/legal/disclaimer.pdf).

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

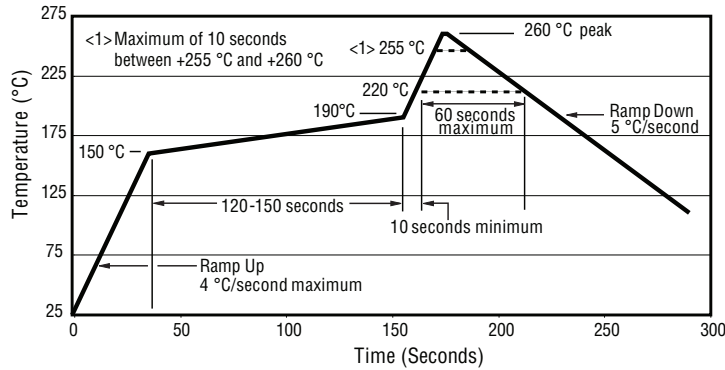
## Applications

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

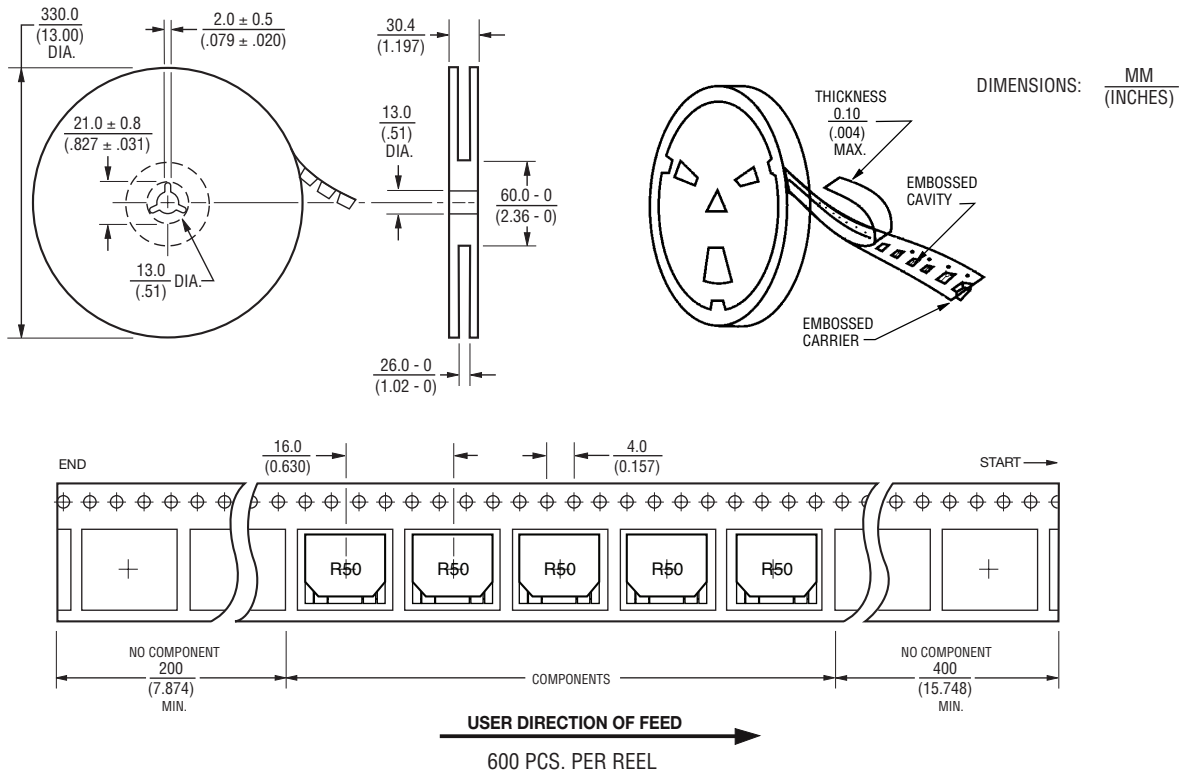
# SRP1205 Series - Shielded Power Inductors

**BOURNS®**

## Soldering Profile



## Packaging Specifications



REV. 03/20

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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