

## Excellent Integrated System Limited

Stocking Distributor

Click to view price, real time Inventory, Delivery & Lifecycle Information:

[Bourns Inc.](#)  
[SRP1205-1R0Y](#)

For any questions, you can email us directly:  
[sales@integrated-circuit.com](mailto:sales@integrated-circuit.com)



**Features**

- Shielded construction
- Unit height of 5.6 mm
- Inductance range: 0.3  $\mu$ H to 7.2  $\mu$ 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 ( $\mu$ 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

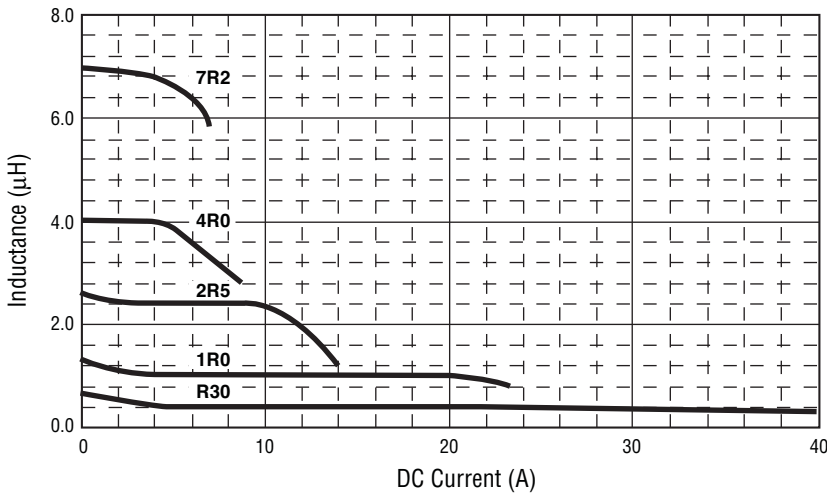
**General Specifications**

Test Voltage.....1 V  
 Test Frequency .....100 KHz  
 Reflow Soldering.....230 °C; 50 sec max.  
 Operating Temperature ..-55 °C to +150 °C  
 (Temperature rise included)  
 Storage Temperature...-55 °C to +150 °C  
 Resistance to Soldering Heat  
 .....+260 °C for 10 sec.

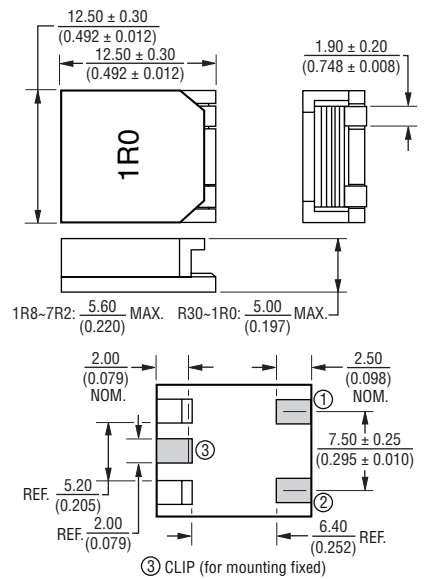
**Materials**

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

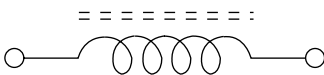
**L vs I Charts**



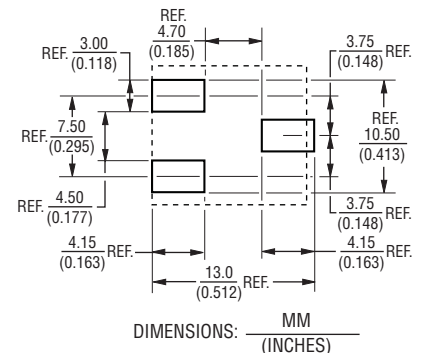
**Product Dimensions**



**Electrical Schematic**



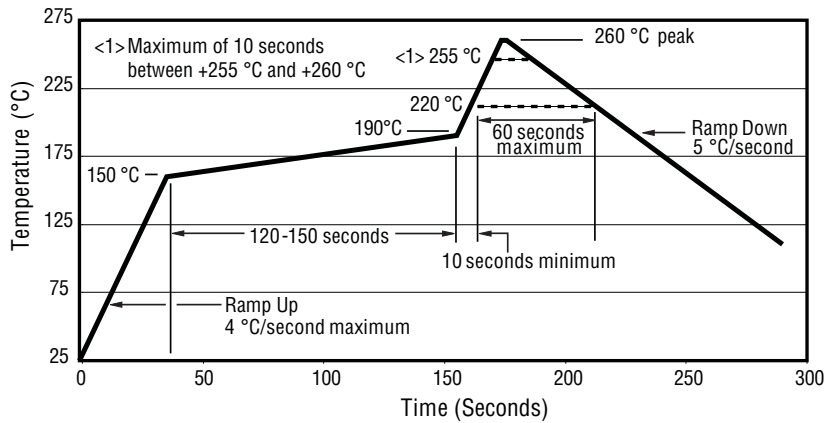
**Recommended Layout**



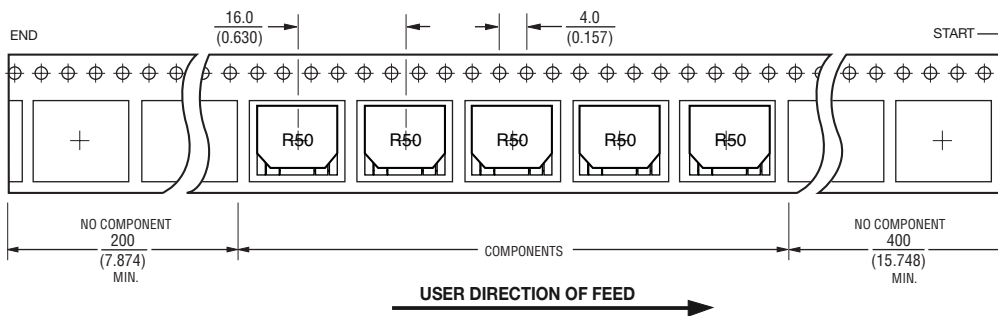
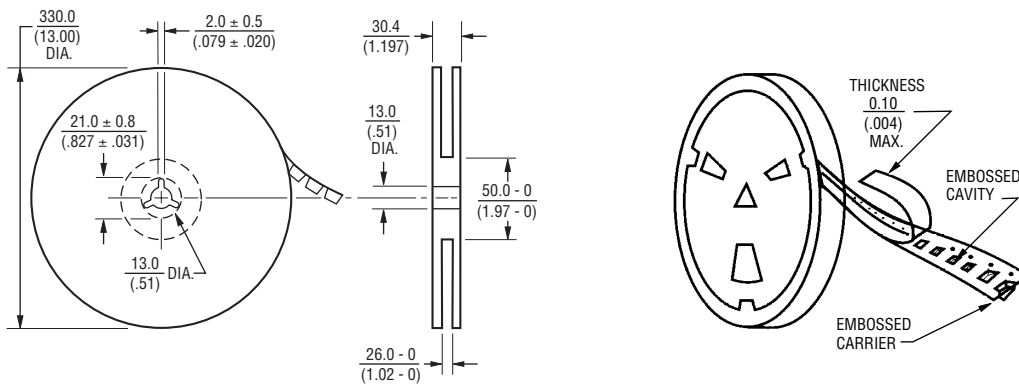
\*RoHS Directive 2002/95/EC Jan 27, 2003 including Annex.  
 Specifications are subject to change without notice.  
 Customers should verify actual device performance in their specific applications.

**SRP1205 Series - Shielded Power Inductors** **BOURNS®**

**Soldering Profile**



**Packaging Specifications**



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