

#### **Features**

- Shielded construction
- Unit height of 5.7 mm
- Inductance range: 0.47 to 3.3 µH
- Current up to 30 A
- RoHS compliant\*

## **Applications**

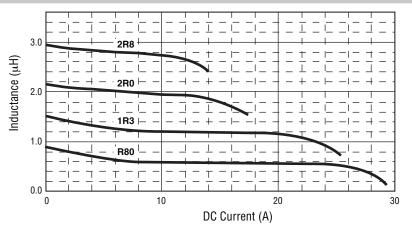
- Input/output of DC/DC converters
- Power supplies for:
  - Portable communications equipment
  - Camcorders
  - LCD TVs

# **SRP1206 Series - Shielded Power Inductors**

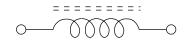
#### **Electrical Specifications**

Bourns Part No.	Initial Inductance L0 (μΗ)	Inductance at Flat Point L1 (μΗ)	Flat Point Ref. (A)	I rms (A)	I sat (A)	DCR (mΩ) Max.
SRP1206-R47Y	0.70 ±25 %	0.47 ±25 %	5.0	30.0	30.0	2.3
SRP1206-R60Y	0.90 ±25 %	0.60 ±25 %	5.0	28.0	26.0	2.3
SRP1206-R80Y	1.10 ±25 %	0.80 ±25 %	5.0	26.0	25.0	3.2
SRP1206-1R3Y	1.50 ±25 %	1.30 ±25 %	4.0	22.0	19.0	3.6
SRP1206-2R0Y	2.20 ±25 %	2.00 ±25 %	4.0	17.0	15.0	6.0
SRP1206-2R8Y	3.00 ±25 %	2.80 ±25 %	3.0	15.0	13.0	7.0
SRP1206-3R3Y	3.50 ±25 %	3.30 ±25 %	3.0	14.0	12.0	7.0

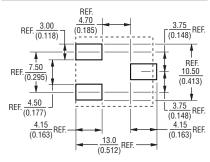
#### L vs I Charts



#### **Electrical Schematic**



### **Recommended Layout**



General Specifications
Test Voltage1 V
Test Frequency100 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.
Moisture Sensitivity Level1

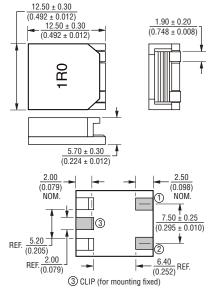
<sup>1</sup> Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

ESD Classification (HBM).....N/A

#### **Materials**

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

#### **Product Dimensions**

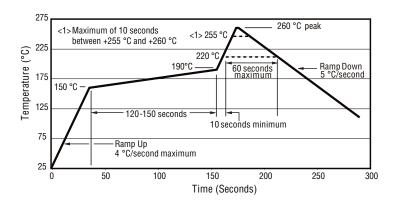


DIMENSIONS:  $\frac{MM}{(INCHES)}$ 

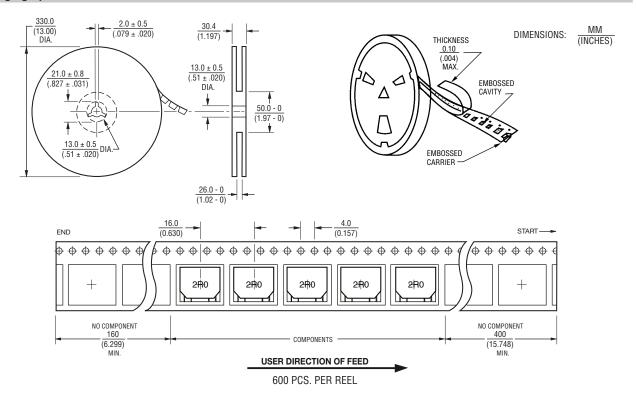


www.P65Warnings.ca.gov

#### **Soldering Profile**



### **Packaging Specifications**



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<u>SRP1206-1R3Y</u> <u>SRP1206-2R0Y</u> <u>SRP1206-2R8Y</u> <u>SRP1206-R47Y</u> <u>SRP1206-R60Y</u> <u>SRP1206-R80Y</u> <u>SRP1206-R80Y</u> <u>SRP1206-3R3Z</u> <u>SRP1206-3R3Z</u>