



**THE DATASHEET OF  
SRP1206-R47Y**





- ### Features
- Shielded construction
  - Unit height of 5.7 mm
  - Inductance range: 0.47 to 3.3  $\mu$ H
  - Current up to 30 A
  - RoHS compliant\*

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

## SRP1206 Series - Shielded Power Inductors

### Electrical Specifications

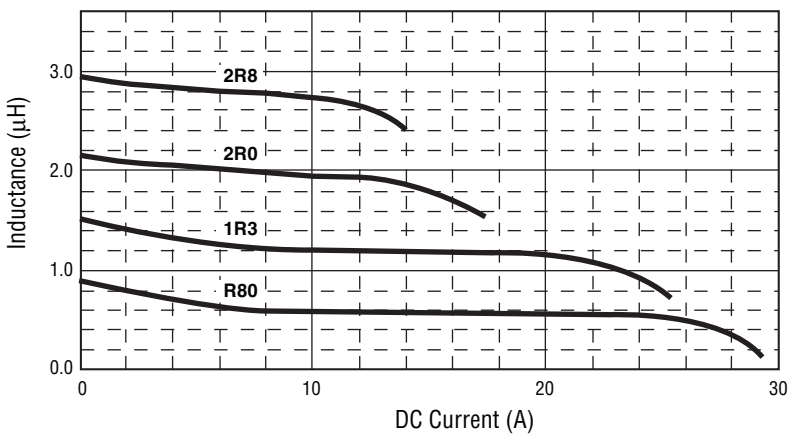
Bourns Part No.	Initial Inductance L0 ( $\mu$ H)	Inductance at Flat Point L1 ( $\mu$ H)	Flat Point Ref. (A)	I rms (A)	I sat (A)	DCR (m $\Omega$ ) Max.
SRP1206-R47Y	0.70 $\pm$ 25 %	0.47 $\pm$ 25 %	5.0	30.0	30.0	2.3
SRP1206-R60Y	0.90 $\pm$ 25 %	0.60 $\pm$ 25 %	5.0	28.0	26.0	2.3
SRP1206-R80Y	1.10 $\pm$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

### 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.  
 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.

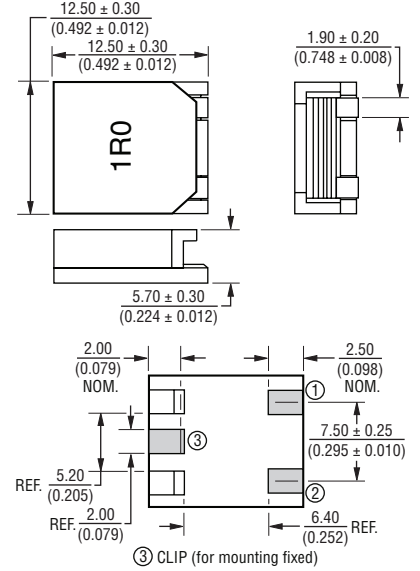
### L vs I Charts



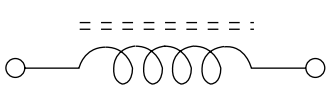
### Materials

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

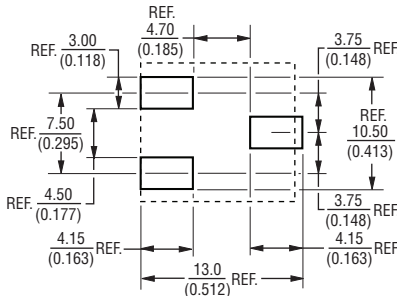
### Product Dimensions



### Electrical Schematic



### Recommended Layout



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

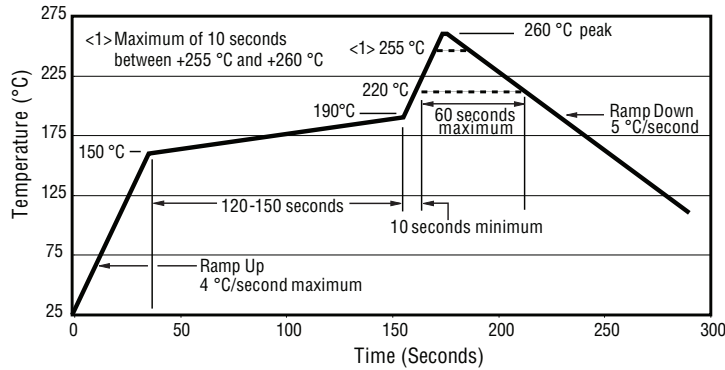
## Applications

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

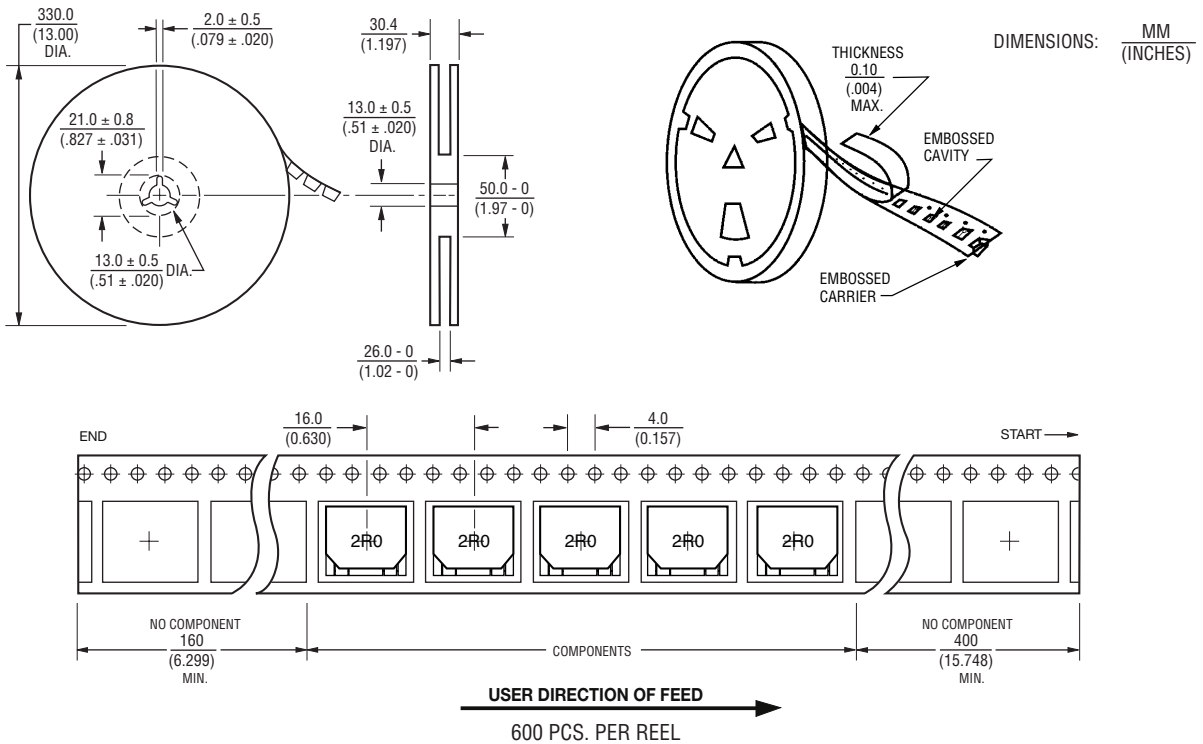
# SRP1206 Series - Shielded Power Inductors

**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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