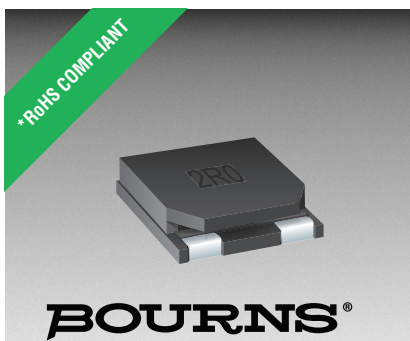




## Features

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

## Applications

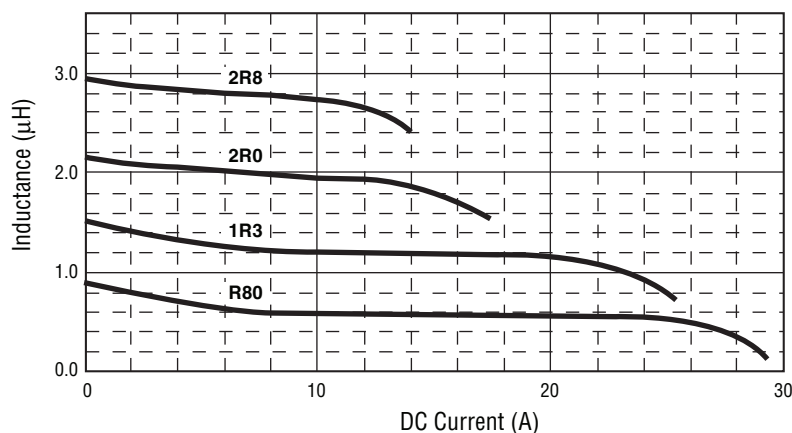
- Input/output of DC/DC converters
- Power supplies for:
  - Portable communications equipment
  - Camcorders
  - LCD TVs
  - Car audio systems

# SRP1206 Series - Shielded Power Inductors

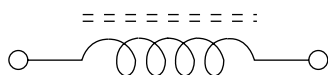
## Electrical Specifications

| 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                    |

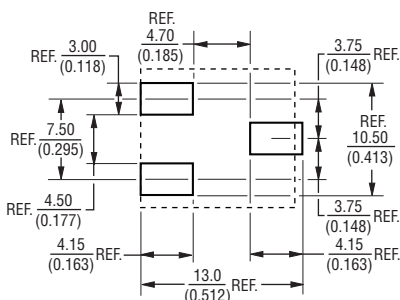
## L vs I Charts



## Electrical Schematic



## Recommended Layout



## General Specifications

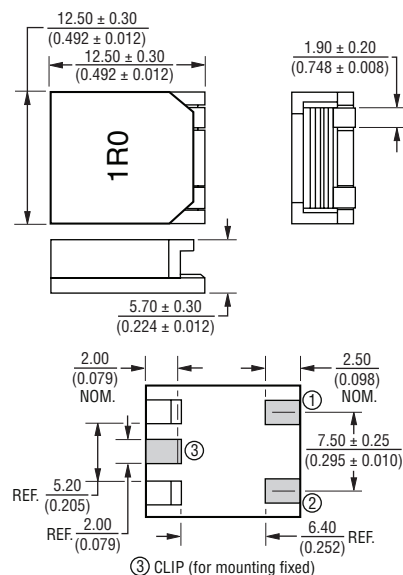
Test Voltage ..... 1 V  
 Test Frequency ..... 100 KHz  
 Reflow Soldering .. 230 °C; 50 sec. max.  
 Operating Temperature  
 ..... -55 °C to +150 °C  
 (Temperature rise included)  
 Storage Temperature  
 ..... -55 °C to +150 °C  
 Resistance to Soldering Heat  
 ..... +260 °C for 10 sec.  
 Moisture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

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

\*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.

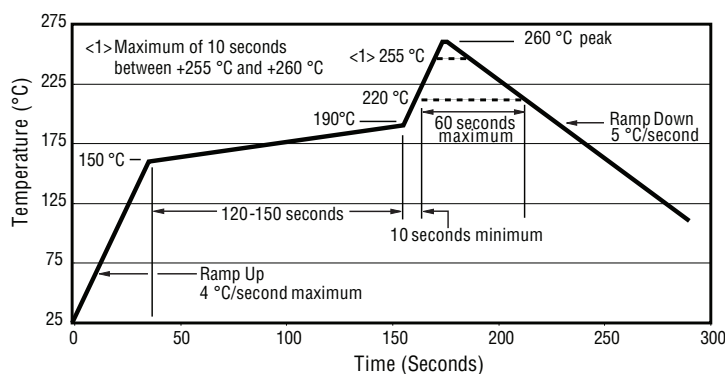
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.

Users should verify actual device performance in their specific applications.

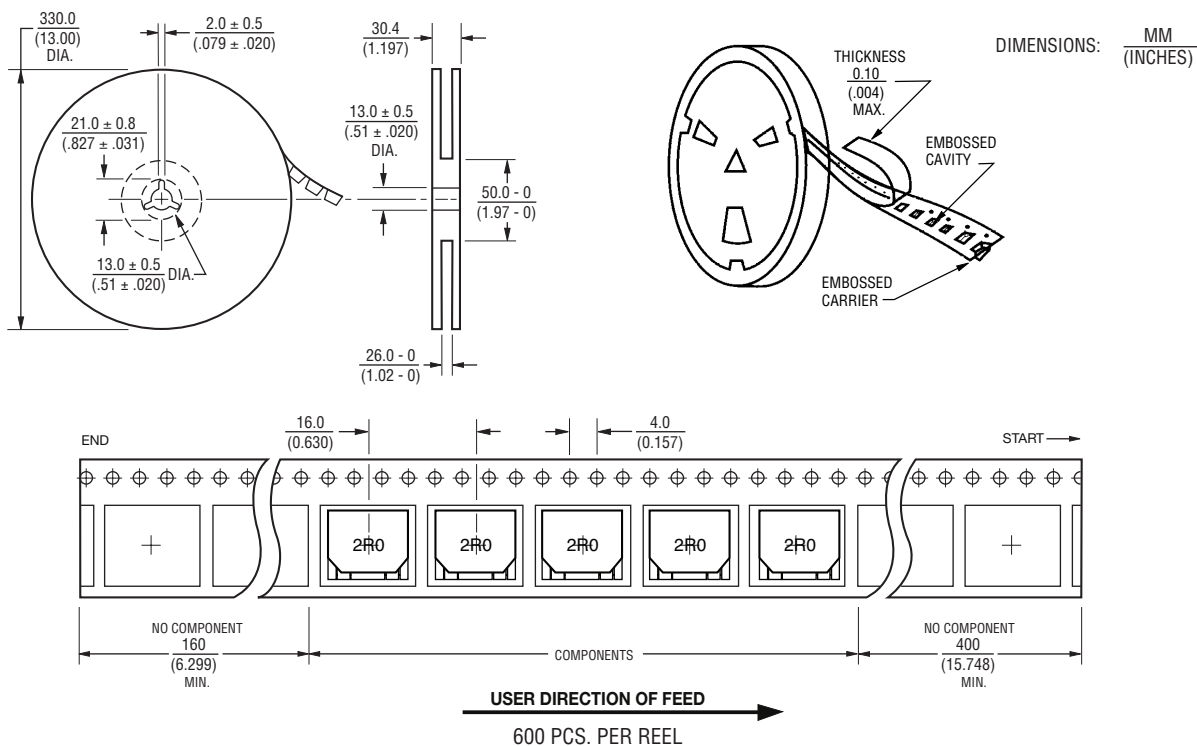
# SRP1206 Series - Shielded Power Inductors

**BOURNS®**

## Soldering Profile



## Packaging Specifications



REV. 09/17

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.