



## Features

- Shielded construction
- Unit height of 4.5 mm
- Inductance range: 0.36  $\mu$ H to 3.2  $\mu$ H
- Current up to 23 A
- RoHS compliant\*

## Applications

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

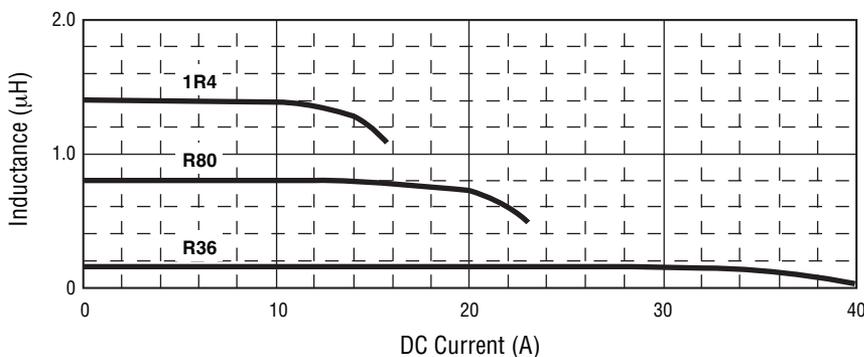
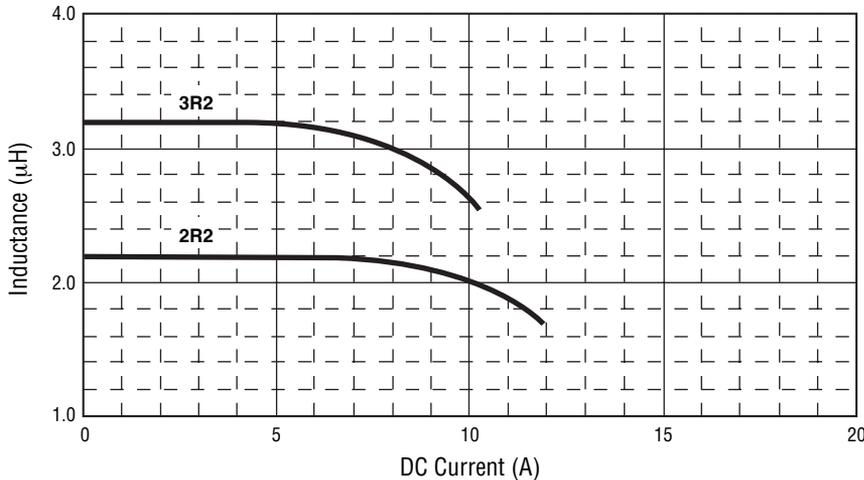
**BOURNS®**

# SRP1045 Series - Shielded Power Inductors

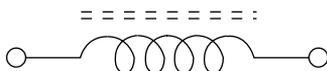
### Electrical Specifications

Bourns Part No.	Inductance L ( $\mu$ H)	I rms (A)	I sat (A)	DCR (m $\Omega$ ) max.
SRP1045-R36Y	0.36 $\pm$ 30 %	23.0	26.0	1.7
SRP1045-R80M	0.80 $\pm$ 20 %	15.0	17.0	3.9
SRP1045-1R4M	1.40 $\pm$ 20%	13.0	14.0	4.4
SRP1045-2R2M	2.20 $\pm$ 20 %	9.5	10.0	8.7
SRP1045-3R2M	3.20 $\pm$ 20 %	8.0	8.0	10.4

### Inductance vs. DC Superposition Characteristics



### Electrical Schematic



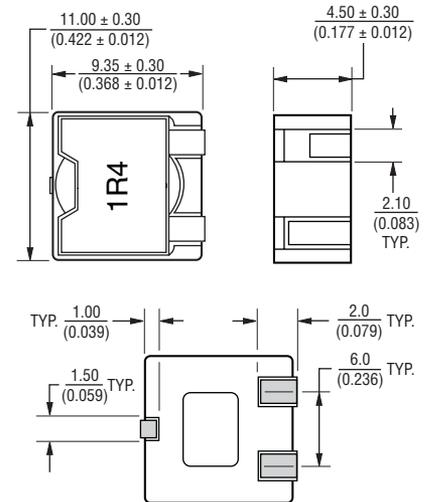
### General Specifications

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.

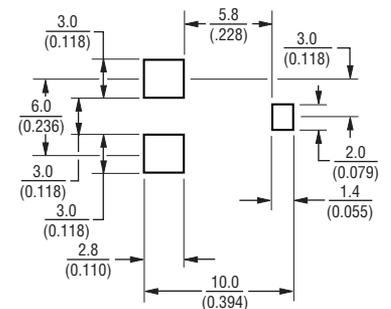
### Materials

Core.....Ferrite ER  
 Wire.....Enameled copper  
 Terminal.....Cu/Ni/Sn  
 Rated Current.....Ind. drops 25 % at I sat  
 Temperature Rise.....40 °C at rated I rms  
 Packaging .....600 pcs. per 13-inch reel

### Product Dimensions



### Recommended Layout



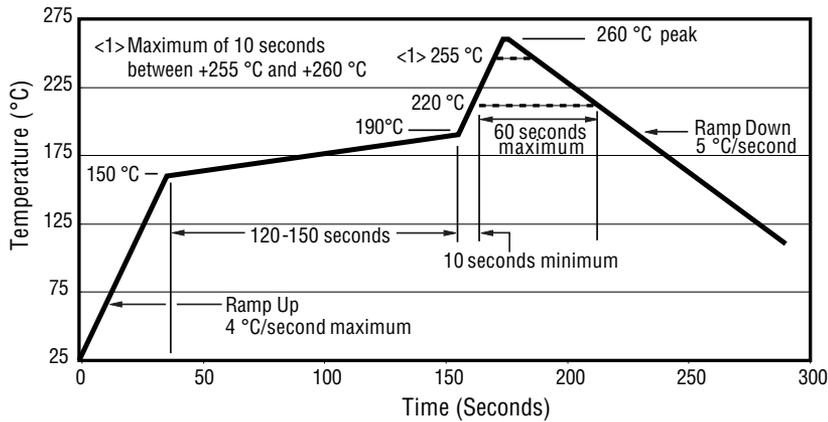
DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

\*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.

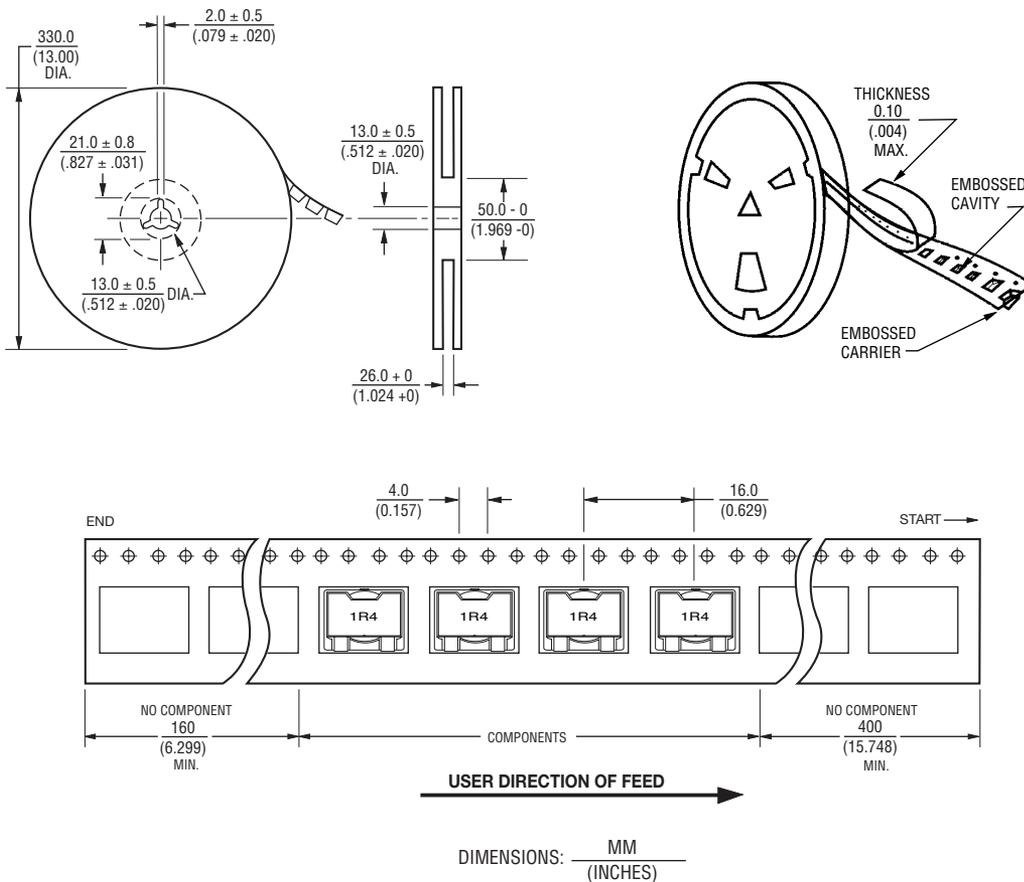
# SRP1045 Series - Shielded Power Inductors

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## Soldering Profile



## Packaging Specifications



REV. 05/11

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Bourns:

[SRP1045-1R4M](#) [SRP1045-2R2M](#) [SRP1045-3R2M](#) [SRP1045-R36Y](#) [SRP1045-R80M](#)