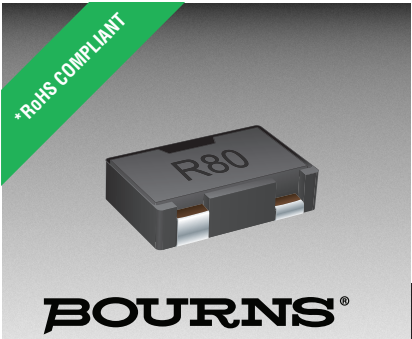




**THE DATASHEET OF  
SRP1045-1R4M**





**Features**

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

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

**SRP1045 Series - Shielded Power Inductors**

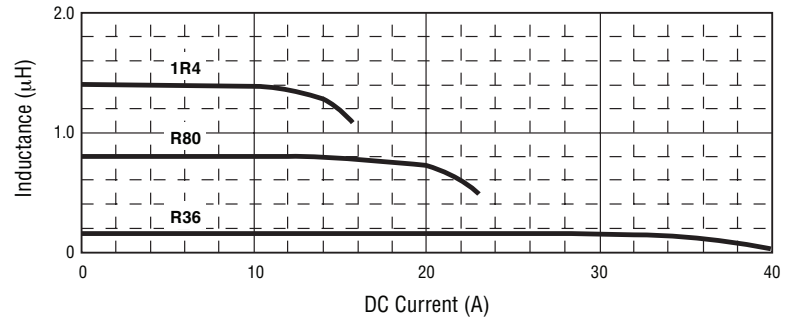
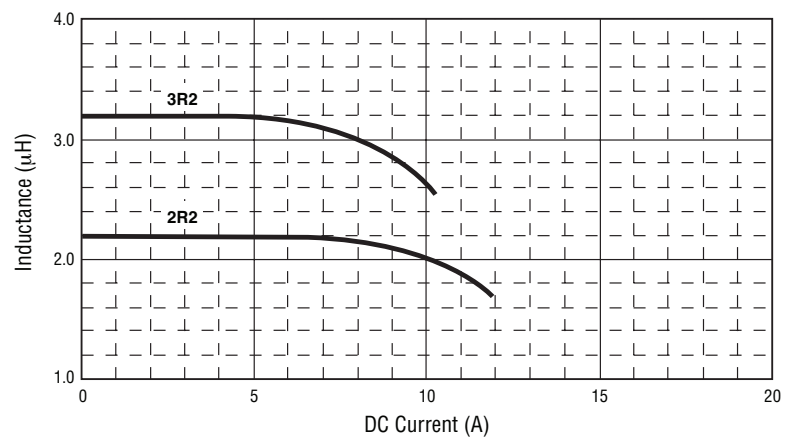
**Electrical Specifications**

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

**General Specifications**

Test Voltage ..... 1 V  
 Test Frequency ..... 100 KHz  
 Reflow Soldering .. 230  $^{\circ}$ C; 50 sec. max.  
 Operating Temperature ..... -55  $^{\circ}$ C to +150  $^{\circ}$ C  
 (Temperature rise included)  
 Storage Temperature ..... -55  $^{\circ}$ C to +150  $^{\circ}$ C  
 Resistance to Soldering Heat ..... +260  $^{\circ}$ C for 10 sec.  
 Moisture Sensitivity Level ..... 1  
 ESD Classification (HBM)..... N/A

**Inductance vs. DC Superposition Characteristics**

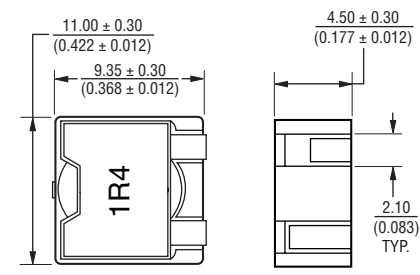


<sup>1</sup> Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

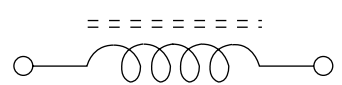
**Materials**

Core ..... Ferrite ER  
 Wire ..... Enameled copper  
 Terminal ..... Cu/Ni/Sn  
 Rated Current ..... Ind. drops 25 % at Isat  
 Temperature Rise ..... 40  $^{\circ}$ C at rated Irms  
 Packaging ..... 600 pcs. per 13-inch reel

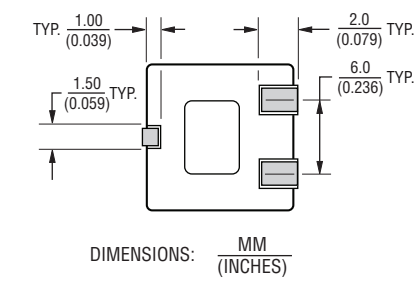
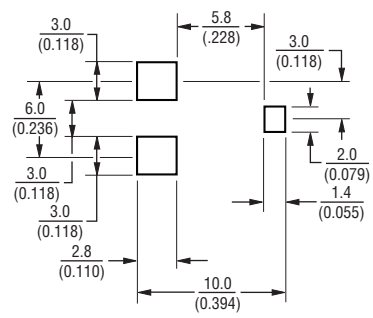
**Product Dimensions**



**Electrical Schematic**



**Recommended Layout**



\*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.

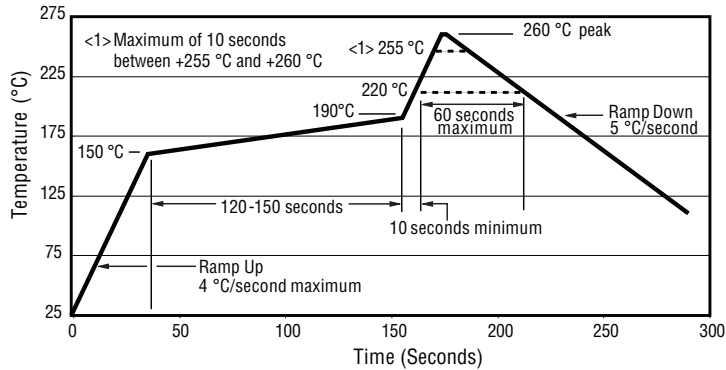
## Applications

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

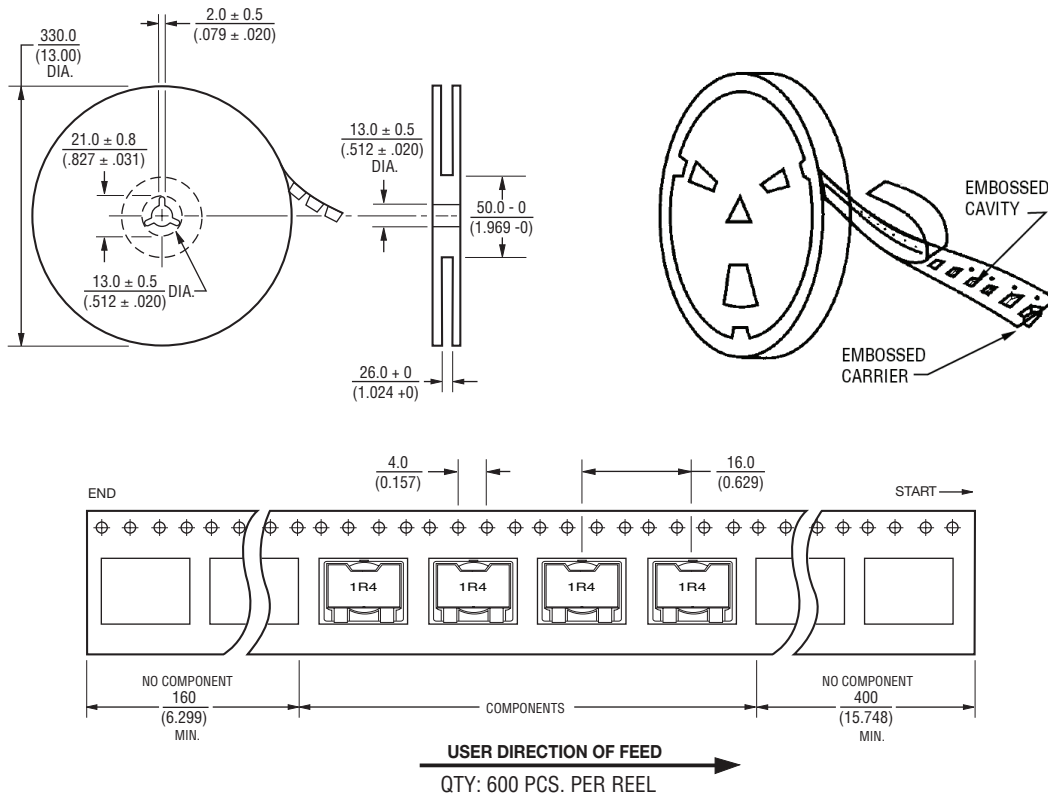
# SRP1045 Series - Shielded Power Inductors

**BOURNS®**

## Soldering Profile



## Packaging Specifications





REV. 12/17

Specifications are subject to change without notice.

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## Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

-  [View SRP1045-1R4M on WIN SOURCE](#)
-  [Bourns Inc. Information](#)

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