



## Features

- Semi-shielded construction
- High rated current
- Component height 4.5 mm
- Inductance range: 1 to 100  $\mu$ H
- Rated current up to 4.2 A
- RoHS compliant\* and halogen free\*\*

## Applications

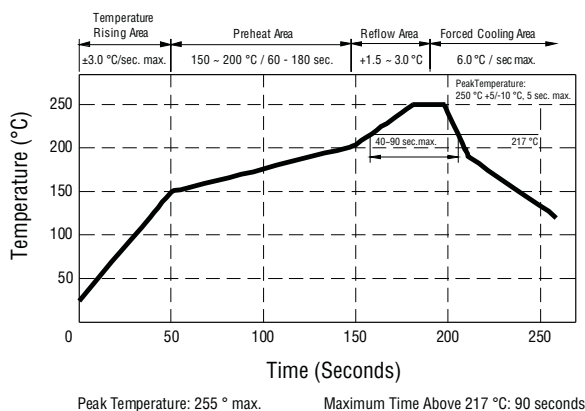
- DC/DC converters
- Notebook computers
- Digital video cameras
- HDDs
- Cell phones
- Televisions, LCD displays

# SRN6045 Series - Semi-shielded Power Inductors

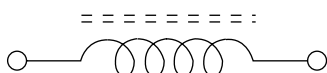
## Electrical Specifications @ 25 °C

Bourns Part No.	Inductance @ 100 KHz/1 V		DCR ( $\Omega$ ) Max.	I <sub>rms</sub> (A)	I <sub>sat</sub> (A)
	L ( $\mu$ H)	Tol. %			
SRN6045-1R0Y	1.0	30	0.0139	4.2	8.5
SRN6045-1R3Y	1.3	30	0.017	4.0	8.0
SRN6045-1R8Y	1.8	30	0.0198	3.7	7.0
SRN6045-2R2Y	2.2	30	0.0251	3.5	6.0
SRN6045-3R3Y	3.3	30	0.0302	3.2	5.0
SRN6045-4R7Y	4.7	30	0.0376	3.0	4.0
SRN6045-6R8Y	6.8	30	0.0473	2.8	3.8
SRN6045-8R2Y	8.2	30	0.055	2.7	3.3
SRN6045-100M	10	20	0.0586	2.5	3.0
SRN6045-150M	15	20	0.0958	1.9	2.3
SRN6045-220M	22	20	0.142	1.5	1.9
SRN6045-330M	33	20	0.188	1.4	1.5
SRN6045-470M	47	20	0.257	1.1	1.3
SRN6045-680M	68	20	0.351	0.9	1.0
SRN6045-101M	100	20	0.494	0.7	0.8

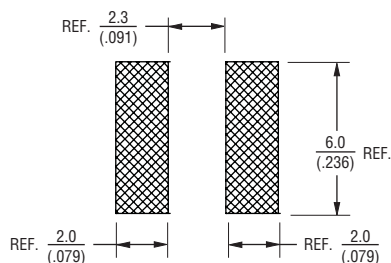
## Soldering Profile



## Electrical Schematic



## Recommended Layout



## General Specifications

Operating Temperature ..... -40 °C to +125 °C  
(Temperature rise included)  
Storage Temperature .. -40 °C to +125 °C  
Resistance to Solder Heat ..... +250 °C for 10 sec.  
Temperature Rise ..... 40 °C at rated I<sub>rms</sub>  
Rated Current ..... Inductance drops 30 % at I<sub>sat</sub>

## Materials

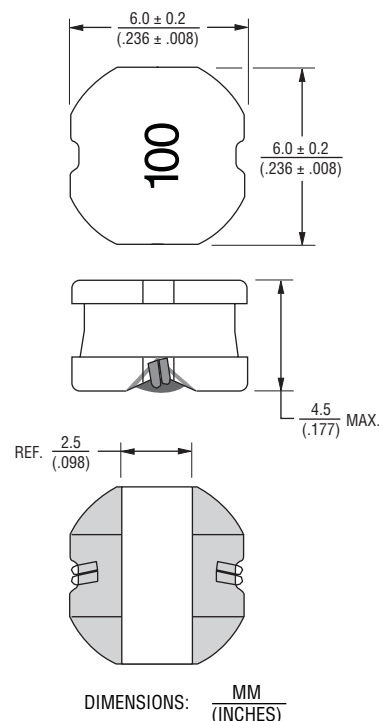
Core ..... Ferrite  
Wire ..... Enameled copper  
Terminal Finish ..... Sn  
Coating ..... Magnetic epoxy resin  
Packaging ..... 1000 pcs. per 13-inch reel

## How to Order

**SRN6045 - 100M**

Model .....  
Value Code (see table) .....

## Product Dimensions



\* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

\*\* Bourns follows the prevailing definition of "halogen free" in the industry. Bourns considers a product to be "halogen free" if (a) the Bromine (Br ) content is 900 ppm or less; (b) the Chlorine ( Cl ) content is 900 ppm or less; and (c) the total Bromine (Br ) and Chlorine ( Cl ) content is 1500 ppm or less.

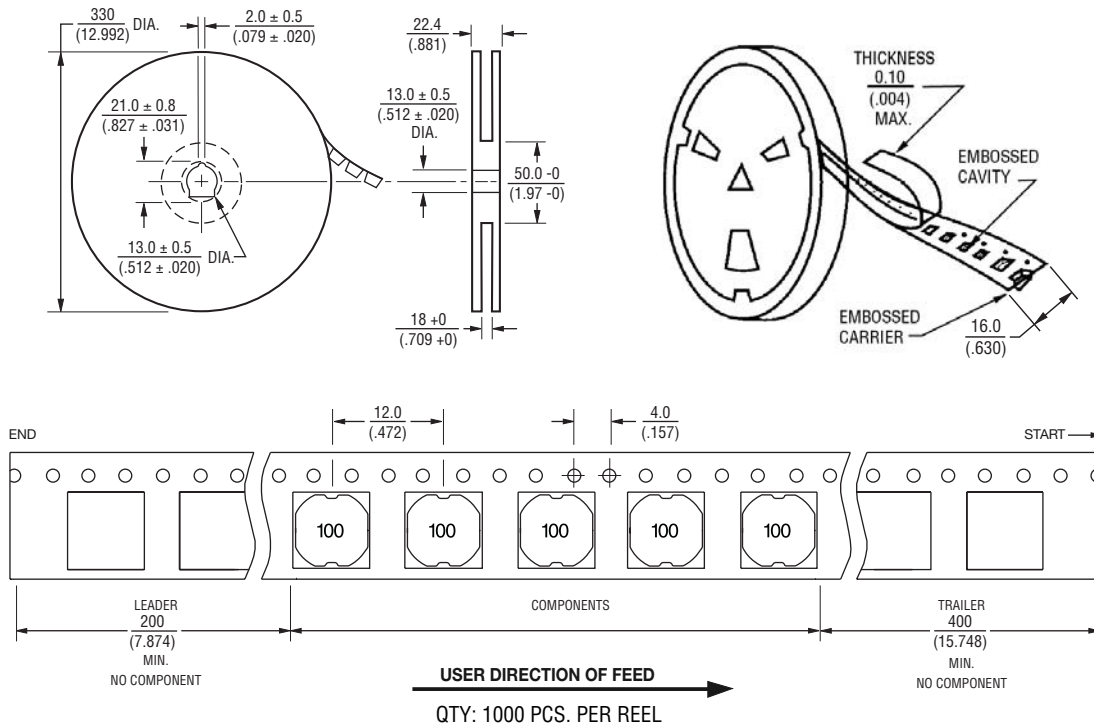
Specifications are subject to change without notice.

Customers should verify actual device performance in their specific applications.

# SRN6045 Series - Semi-shielded Power Inductors

**BOURNS®**

## Packaging Specifications



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

**BOURNS®**

**Asia-Pacific:** Tel: +886-2 2562-4117 • Fax: +886-2 2562-4116

**Europe:** Tel: +41-41 768 5555 • Fax: +41-41 768 5510

**The Americas:** Tel: +1-951 781-5500 • Fax: +1-951 781-5700

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