

### Features

- Semi-shielded construction
- High rated current
- Component height 4.5 mm
- Inductance range: 1 to 220 µH
- Rated current up to 4.2 A
- RoHS compliant\* and halogen free\*\*

## **Applications**

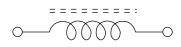
- DC/DC converters
- Notebook computers
- Digital video cameras
- HDDs
- Cell phones
- Televisions, LCD displays

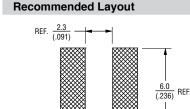
# SRN6045 Series - Semi-shielded Power Inductors

#### Electrical Specifications @ 25 °C

	Inductance @ 100 KHz/1 V		Q	Test Frea.	SRF (MHz)	DCR (Ω)	Irms	Isat
Bourns Part No.	L (μΗ)	Tol. %	(Ref.)	(MHz)	Typ.	Max.	(A)	(A)
SRN6045-1R0Y	1.0	30	15	7.96	50	0.0139	4.2	8.5
SRN6045-1R3Y	1.3	30	15	7.96	48	0.017	4.0	8.0
SRN6045-1R8Y	1.8	30	15	7.96	38	0.0198	3.7	7.0
SRN6045-2R2Y	2.2	30	15	7.96	35	0.0251	3.5	6.0
SRN6045-3R3Y	3.3	30	15	7.96	27	0.0302	3.2	5.0
SRN6045-4R7Y	4.7	30	15	7.96	22	0.0376	3.0	4.0
SRN6045-6R8Y	6.8	30	15	7.96	20	0.0473	2.8	3.8
SRN6045-8R2Y	8.2	30	15	7.96	18	0.055	2.7	3.3
SRN6045-100M	10	20	17	2.52	15	0.0586	2.5	3.0
SRN6045-150M	15	20	17	2.52	13	0.0958	1.9	2.3
SRN6045-220M	22	20	17	2.52	11	0.142	1.5	1.9
SRN6045-330M	33	20	17	2.52	9	0.188	1.4	1.5
SRN6045-470M	47	20	13	2.52	7	0.257	1.1	1.3
SRN6045-680M	68	20	13	2.52	6	0.351	0.9	1.0
SRN6045-101M	100	20	22	0.796	5	0.494	0.7	0.8
SRN6045-221M	220	20	25	0.796	4	1.18	0.6	0.7

#### **Electrical Schematic**





REF.  $\frac{2.0}{(.079)}$ 

- REF.  $\frac{2.0}{(.079)}$ 

#### **General Specifications**

#### **Operating Temperature**

.....-40 °C to +125 °C (Temperature rise included) Storage Temperature (Component)

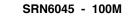
.....+250 °C for 10 sec. Temperature Rise .....40 °C at rated Irms Rated Current

.....Inductance drops 30 % at Isat Moisture Sensitivity Level......1 ESD Classification (HBM).....N/A

#### Materials

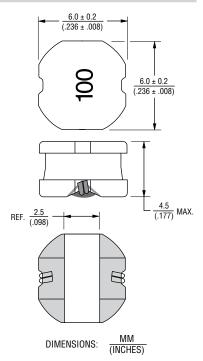
Core	Ferrite
Wire	Enameled copper
Terminal Finish	Sn/Ag/Cu
Coating	Magnetic epoxy resin
Packaging 1000	pcs. per 13-inch reel

#### How to Order



Model — J Value Code (see table) — J

#### **Product Dimensions**





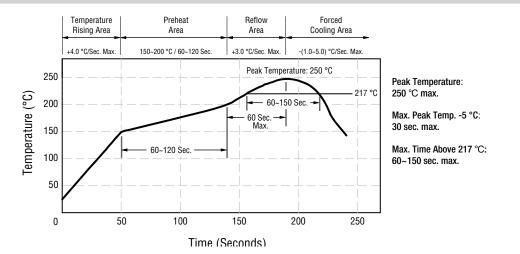
\* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.
\*\*Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.
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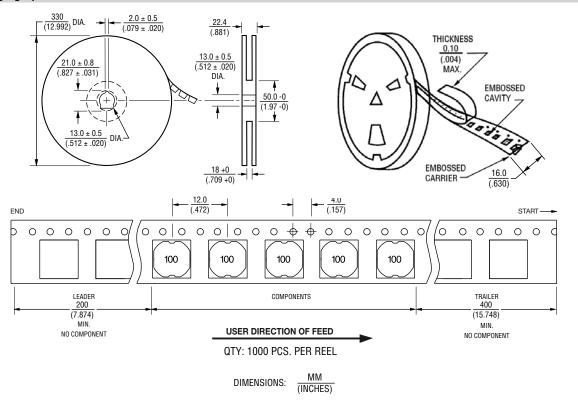
# SRN6045 Series - Semi-shielded Power Inductors

## BOURNS

#### **Soldering Profile**



#### **Packaging Specifications**



#### REV. 08/17

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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 SRN6045-101M
 SRN6045-150M
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 SRN6045-1R3Y
 SRN6045-1R8Y
 SRN6045-SRN6045-2R2Y
 SRN6045-330M
 SRN6045-3R3Y
 SRN6045-470M
 SRN6045-4R7Y
 SRN6045-680M

 SRN6045-6R8Y
 SRN6045-8R2Y
 SRN6045-221M
 SRN6045-221M
 SRN6045-221M