

*RoHS COMPLIANT



BOURNS®

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

Bourns Part No.	Inductance @ 100 KHz/1 V		Q (Ref.)	Test Freq. (MHz)	SRF (MHz) Typ.	DCR (Ω) Max.	I _{rms} (A)	I _{sat} (A)
	L (µH)	Tol. %						
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

General Specifications

Operating Temperature -40 °C to +125 °C
 (Temperature rise included)
 Storage Temperature (Component) -40 °C to +125 °C
 Resistance to Solder Heat +250 °C for 10 sec.
 Temperature Rise 40 °C at rated I_{rms}
 Rated Current Inductance drops 30 % at I_{sat}
 Moisture Sensitivity Level 1
 ESD Classification (HBM) N/A

Materials

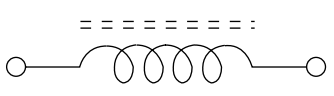
Core Ferrite
 Wire Enameled copper
 Terminal Finish Sn/Ag/Cu
 Coating Magnetic epoxy resin
 Packaging 1000 pcs. per 13-inch reel

How to Order

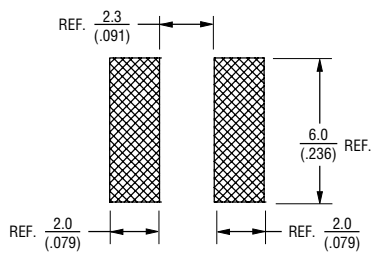
SRN6045 - 100M

Model _____
 Value Code (see table) _____

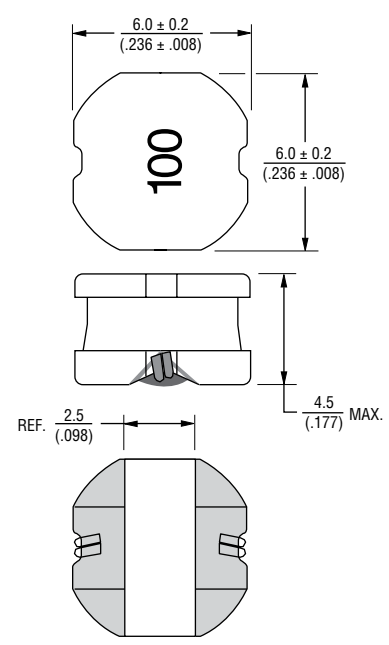
Electrical Schematic



Recommended Layout



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.

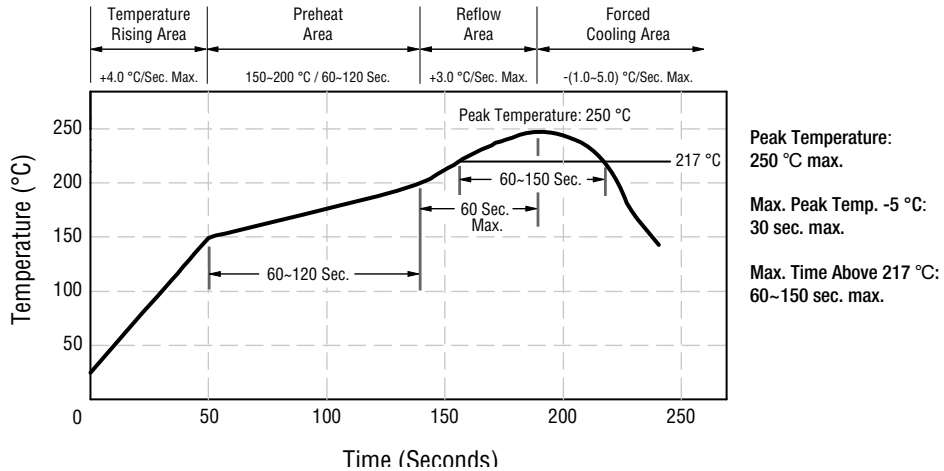
Specifications are subject to change without notice.
 The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.
 Users should verify actual device performance in their specific applications.

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

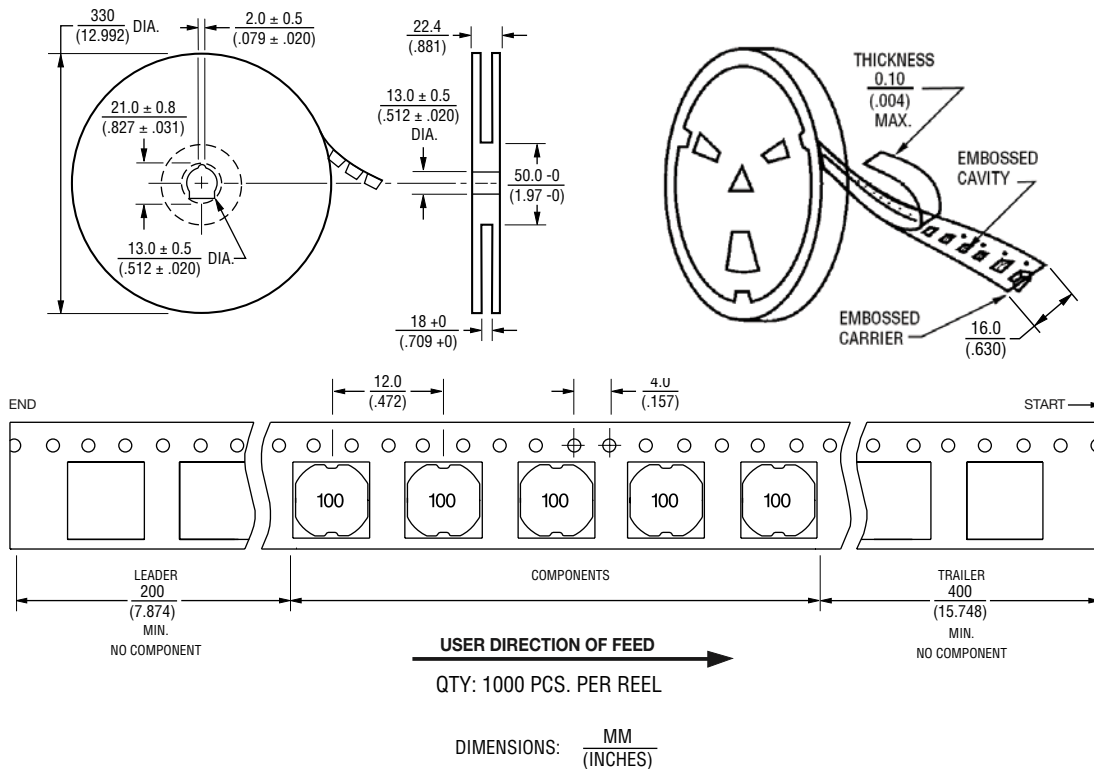
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Soldering Profile



Packaging Specifications



REV. 08/17

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