



Features

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

Applications

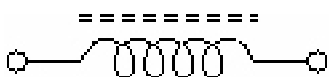
- DC/DC converters
- Notebook computers
- Digital video cameras
- HDDs
- Cell phones
- Televisions, LCD displays

SRN6045 Series - Semi-shielded Power Inductors

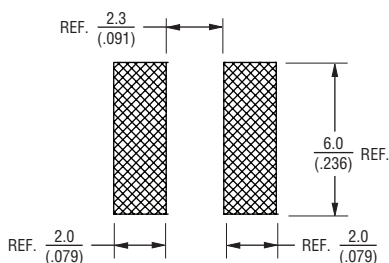
Electrical Specifications @ 25 °C

Bourns Part No.	Inductance @ 100 KHz/1 V		Q (Ref.)	Test Freq. (MHz)	SRF (MHz) Typ.	DCR (Ω) Max.	Irms (A)	Isat (A)
	L (μ H)	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

Electrical Schematic



Recommended Layout



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

Materials

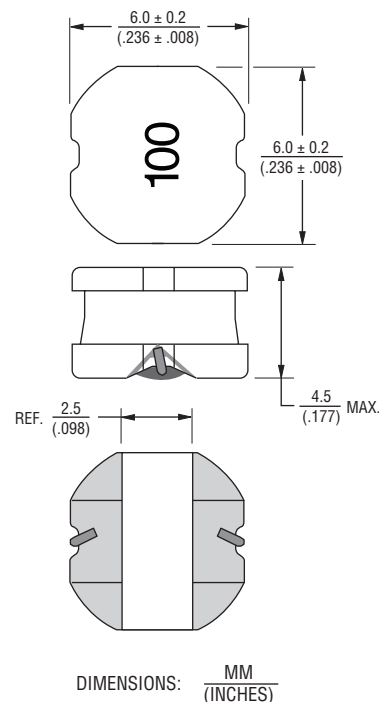
Core Ferrite
Wire Enameled copper
Terminal Finish Sn/Ag/Cu
Coating Magnetic epoxy resin
Packaging 1000 pcs. per 13-inch reel

How to Order

SRN6045 - 100M

Model
Value Code (see table)

Product Dimensions



WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

* RoHS Directive 2015/863, Mar 31, 2015 and Annex.

** 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.

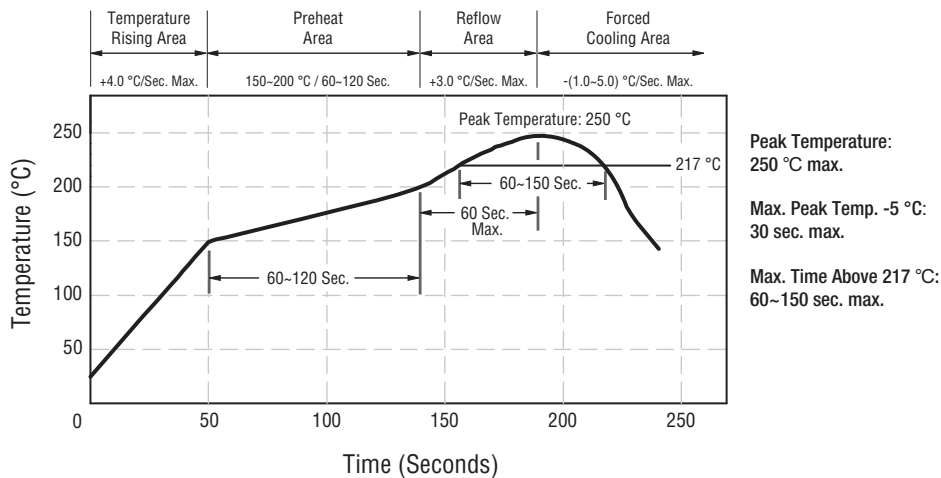
Users should verify actual device performance in their specific applications.

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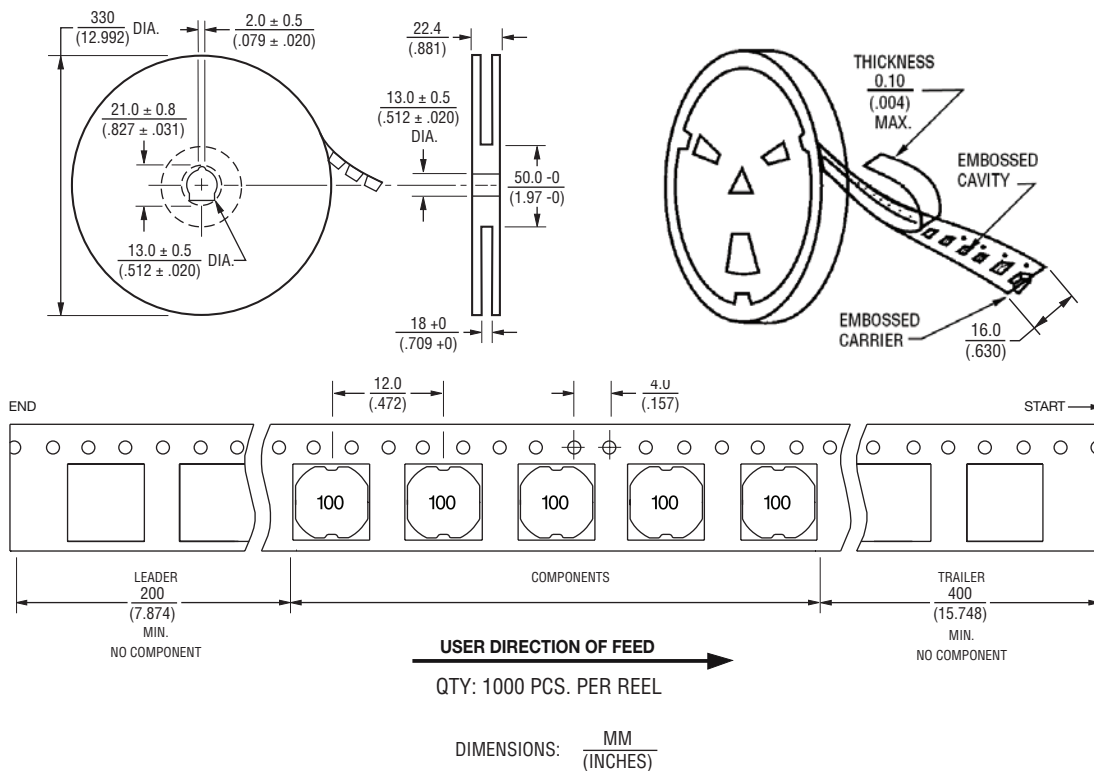
SRN6045 Series - Semi-shielded Power Inductors

BOURNS®

Soldering Profile



Packaging Specifications



REV. 01/20

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