



Features

- Semi-shielded construction
- Component height: 2 mm max.
- Inductance range: 1 to 33 μ H
- High rated current - up to 3.6 A
- RoHS compliant* and halogen free**

Applications

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

SRN5020 Series - Semi-shielded Power Inductors

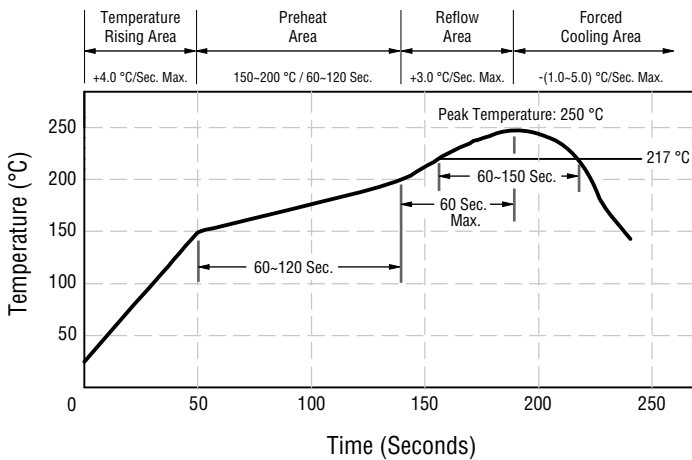
Electrical Specifications @ 25 °C

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 (μ H)	Tol. %						
SRN5020-1R0Y	1.0	30	13	7.96	85	0.025	3.60	4.00
SRN5020-1R5Y	1.5	30	13	7.96	60	0.031	3.20	3.35
SRN5020-2R2Y	2.2	30	11	7.96	50	0.042	2.90	2.90
SRN5020-3R3M	3.3	20	11	7.96	40	0.058	2.40	2.40
SRN5020-4R7M	4.7	20	11	7.96	30	0.072	2.0	2.00
SRN5020-5R6M	5.6	20	11	7.96	28	0.106	1.80	1.80
SRN5020-6R8M	6.8	20	11	7.96	23	0.108	1.65	1.60
SRN5020-100M	10	20	11	2.52	21	0.144	1.45	1.30
SRN5020-150M	15	20	14	2.52	15	0.198	1.20	1.10
SRN5020-220M	22	20	11	2.52	13	0.312	1.00	0.90
SRN5020-330M	33	20	11	2.52	10	0.516	0.90	0.80

Peak Temperature: 250 °C max.

Max. Peak Temperature -5 °C: 30 sec. max.

Soldering Profile

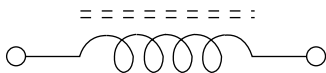


Peak Temperature: 250 °C max.

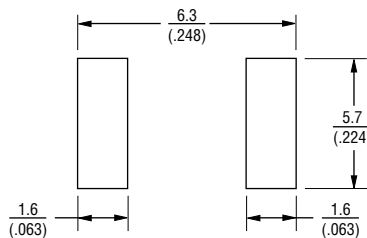
Max. Peak Temp. -5 °C: 30 sec. max.

Max. Time Above 217 °C: 60~150 sec. max.

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

..... +260 °C for 10 sec.

Temperature Rise40 °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

Coating..... Magnetic epoxy resin

Packaging..... 2000 pcs. per 13-inch reel

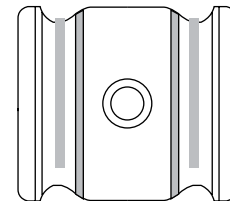
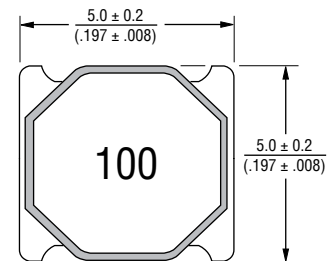
How to Order

SRN5020 - 100M

Model _____

Value Code (see table) _____

Product Dimensions



DIMENSIONS: MM (INCHES)

* RoHS Directive 2002/95/EC Jan 27, 2003 including 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.

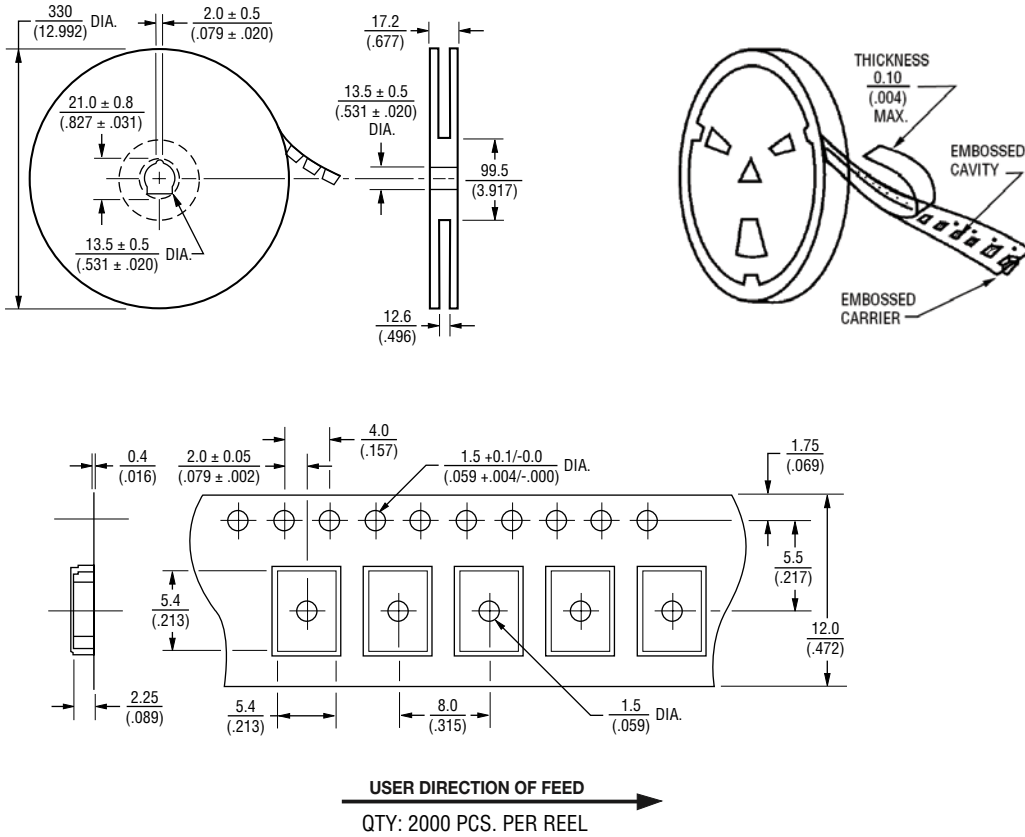
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.

Users should verify actual device performance in their specific applications.

SRN5020 Series - Semi-shielded Power Inductors

BOURNS®

Packaging Specifications



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

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EMEA: Tel: +36 88 520 390 • Fax: +36 88 520 211

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

www.bourns.com

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