



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

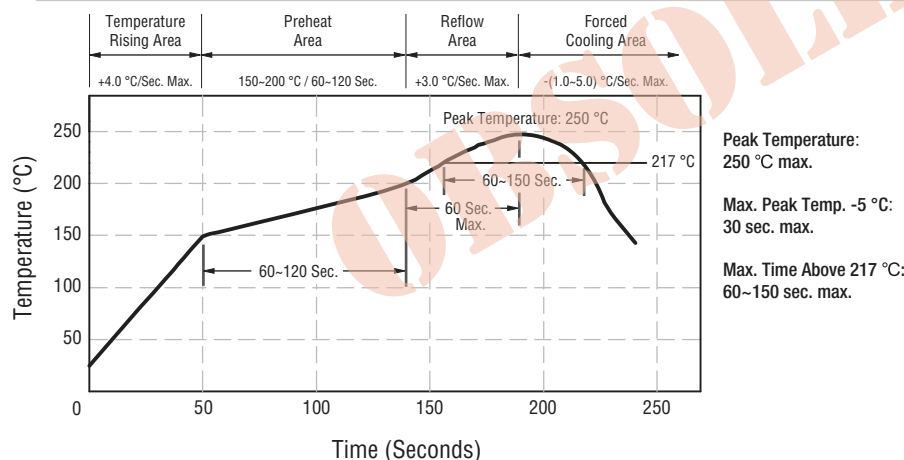
- DC/DC converters
- Notebook computers
- Digital video cameras
- Televisions, LCD displays

SRN5020 Series - Semi-shielded Power Inductors

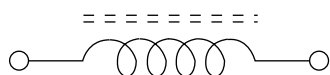
Electrical Specifications @ 25 °C

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

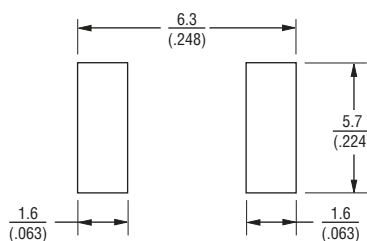
Soldering Profile



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 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

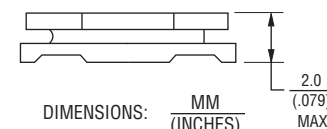
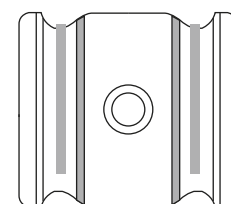
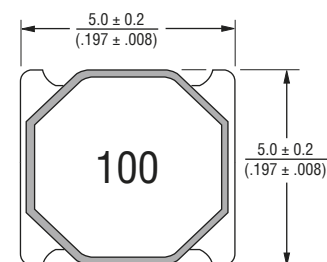
Core Ferrite
Wire Enameled copper
Terminal Finish Sn/Ag/Cu
Coating Magnetic epoxy resin
Packaging 2000 pcs. per 13-inch reel

How to Order

SRN5020 - 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.

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Technical drawing of a 12.6mm diameter metal part, showing three views: top, side, and end view. The drawing includes dimensions in inches and millimeters.

Top View Dimensions:

- Overall Diameter: 12.6 (4.96)
- Inner Hole Diameter: 3.30 (12.992) DIA.
- Inner Hole Position: 2.0 ± 0.5 (0.079 ± .020)
- Inner Hole Diameter: 21.0 ± 0.8 (8.27 ± .031)
- Inner Hole Diameter: 13.5 ± 0.5 (5.31 ± .020) DIA.

Side View Dimensions:

- Overall Length: 17.2 (6.77)
- Inner Hole Diameter: 13.5 ± 0.5 (5.31 ± .020) DIA.
- Inner Hole Position: 99.5 (3.917)
- Inner Hole Diameter: 12.6 (4.96)

End View Dimensions:

- Thickness: 0.10 (.004) MAX.
- Embossed Cavity: EMBOSSED CAVITY
- Embossed Carrier: EMBOSSED CARRIER

Bottom View Dimensions:

- Overall Width: 12.0 (4.72)
- Overall Length: 1.75 (.069)
- Inner Hole Diameter: 1.5 ± 0.1/-0.0 (0.059 +.004/- .000) DIA.
- Inner Hole Position: 2.0 ± 0.05 (0.079 ± .002)
- Inner Hole Diameter: 0.4 (0.016)
- Inner Hole Position: 4.0 (.157)
- Inner Hole Diameter: 5.4 (.213)
- Inner Hole Position: 5.4 (.213)
- Inner Hole Diameter: 8.0 (.315)
- Inner Hole Position: 1.5 (.059) DIA.
- Inner Hole Diameter: 2.25 (.089)
- Inner Hole Position: 5.4 (.213)

USER DIRECTION OF FEED

QTY: 2000 PCS. PER REEL

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

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