

## **Features**

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

# **Applications**

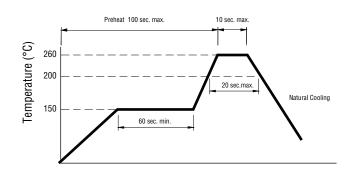
- DC/DC converters
- Notebook computers
- Digital video cameras
- Televisions, LCD displays

# SRN5020 Series - Semi-shielded Power Inductors

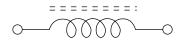
#### Electrical Specifications @ 25 °C

	Inductance @ 100 KHz/1 V		Q	Test Freq.	SRF (MHz)	DCR (Ω)	Irms	Isat
Bourns Part No.	<b>L (μH)</b>	Tol. %	(Ref.)	(MHz)	Typ.	Max.	(A)	(A)
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

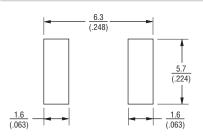
#### **Soldering Profile**



# **Electrical Schematic**



### **Recommended Layout**



#### **General Specifications**

Operating Temperature

.....-25 °C to +120 °C (Temperature rise included) Storage Temperature .. -25 °C to +120 °C Resistance to Solder Heat

.....+260 °C for 10 sec.
Temperature Rise .....40 °C at rated Irms

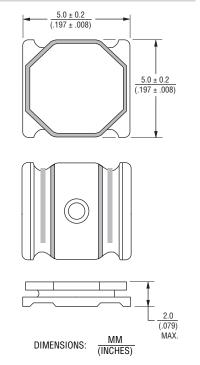
Rated Current ...... Inductance drops 30 % at Isat

#### **Materials**

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

#### **How to Order**

#### **Product Dimensions**



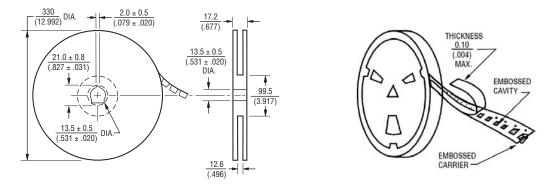
Specifications are subject to change without notice.

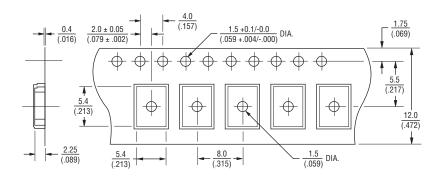
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Users should verify actual device performance in their specific applications.

<sup>\*</sup> RoHS Directive 2002/95/EC Jan 27, 2003 including Annex.

<sup>\*\*</sup> Bourns follows the prevailing definition of "halogen free" in the industry. 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.

## **Packaging Specifications**





USER DIRECTION OF FEED

QTY: 2000 PCS. PER REEL

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

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