

#### **Features**

- Semi-shielded construction
- High rated current
- Component height: 4 mm
- Inductance range: 0.5 to 100 µH
- Rated current up to 10 A
- RoHS compliant\* and halogen free\*\*

### **Applications**

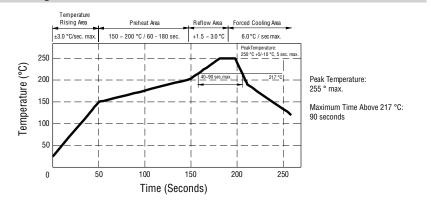
- DC/DC converters
- Notebook computers
- Digital video cameras
- HDDs
- Cell phones
- Televisions, LCD displays

# **SRN8040 Series - Semi-shielded Power Inductors**

#### Electrical Specifications @ 25 °C

	Inductance @ 100 KHz / 1 V		Q	Test Freg.	SRF (MHz)	DCR	Irms	Isat
Bourns Part No.	<b>L (μH)</b>	Tol. %	(Ref.)	(MHz)	Typ.	(Ω) Max.	(A)	(A)
SRN8040-R50Y	0.5	30	13	7.96	125	0.007	10	12
SRN8040-1R0Y	1.0	30	13	7.96	75	0.01	7.8	11
SRN8040-1R5Y	1.5	30	13	7.96	55	0.011	7	8.2
SRN8040-2R2Y	2.2	30	13	7.96	40	0.013	6.3	7.4
SRN8040-3R3Y	3.3	30	13	7.96	34	0.021	5.6	5.5
SRN8040-3R6Y	3.6	30	13	7.96	32	0.022	4.9	5.3
SRN8040-4R7Y	4.7	30	13	7.96	28	0.024	4.1	4.7
SRN8040-6R8Y	6.8	30	13	7.96	23	0.033	3.9	4.2
SRN8040-8R2Y	8.2	30	13	7.96	20	0.045	3.7	4
SRN8040-100M	10	20	20	2.52	18	0.05	3.1	3.4
SRN8040-150M	15	20	15	2.52	14	0.07	2.4	2.7
SRN8040-220M	22	20	20	2.52	12	0.1	2.2	2.2
SRN8040-330M	33	20	20	2.52	10	0.145	1.7	1.9
SRN8040-470M	47	20	15	2.52	9	0.19	1.4	1.5
SRN8040-680M	68	20	20	2.52	7	0.275	1.1	1.2
SRN8040-101M	100	20	10	0.796	6	0.4	1	1

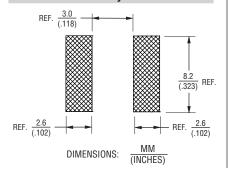
### Soldering Profile



#### **Electrical Schematic**



#### **Recommended Layout**



#### **General Specifications**

Operating Temperature

.....-40 °C to +125 °C (Temperature rise included) Storage Temperature .. -40 °C to +125 °C Resistance to Solder Heat

+250 °C for 10 sec. Temperature Rise .....40 °C at rated Irms Rated Current

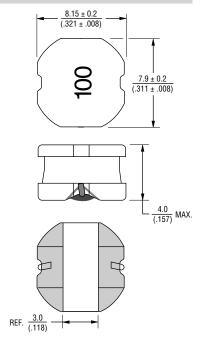
..... Inductance drops 30 % at Isat

#### **Materials**

Core Ferrite
Wire Enameled copper
Terminal Finish Magnetic epoxy resin
Packaging 1000 pcs. per 13-inch reel

#### **How to Order**

### **Product Dimensions**





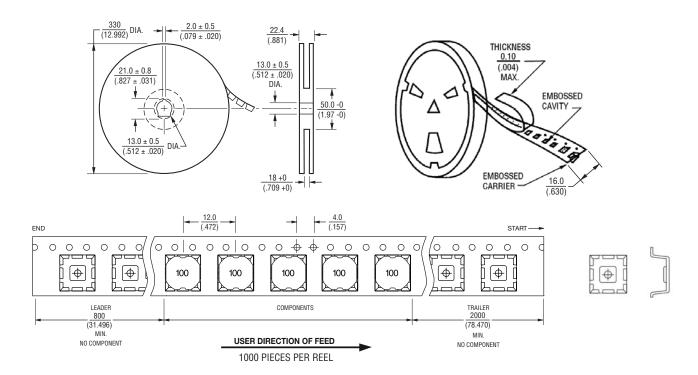
WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

Users should verify actual device performance in their specific applications.

<sup>\*</sup>RoHS Directive 2015/863, Mar 31, 2015 and 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. Specifications are subject to change without notice. Specifications are subject to change without notice.

#### **Packaging Specifications**



MM DIMENSIONS: (INCHES)

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<u>SRN8040-100M</u> <u>SRN8040-101M</u> <u>SRN8040-150M</u> <u>SRN8040-1R0Y</u> <u>SRN8040-1R5Y</u> <u>SRN8040-220M</u> <u>SRN8040-220M</u> <u>SRN8040-383Y</u> <u>SRN8040-3R6Y</u> <u>SRN8040-470M</u> <u>SRN8040-4R7Y</u> <u>SRN8040-680M</u> SRN8040-6R8Y SRN8040-8R2Y SRN8040-R50Y SRN8040-2R0Y