

### Features

- Semi-shielded construction
- Inductance range: 0.33 to 10 µH
- Rated current up to 2.1 A
- Low profile: 0.95 mm max.
- RoHS compliant\* and halogen free\*\*

### Smartphones

LCD displays

HDDs, SSDs

Applications ■ DC/DC converters

Power supplies

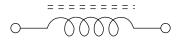
Wearable devices

## SRN2009T Series - Semi-shielded Power Inductors

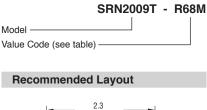
#### Electrical Specifications @ 25 °C

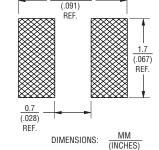
	Inductance @ 1 MHz / 0.1 V		Q (Typ.)	SRF (MHz)	DCR (Ω)	Irms (A)	lsat (A)
Bourns Part No.	<b>L (</b> μ <b>H</b> )	Tol. %	@ 1 MHz	Тур.	±20 %	Тур.	Тур.
SRN2009T-R33M	0.33	±20	30	400	0.028	2.1	2.1
SRN2009T-R47M	0.47	±20	25	300	0.038	2	2
SRN2009T-R68M	0.68	±20	22	250	0.055	1.5	1.5
SRN2009T-1R0M	1.0	±20	20	200	0.065	1.4	1.4
SRN2009T-1R5M	1.5	±20	18	170	0.11	1.2	1.2
SRN2009T-2R2M	2.2	±20	16	150	0.16	0.9	0.9
SRN2009T-3R3M	3.3	±20	15	120	0.25	0.85	0.85
SRN2009T-4R7M	4.7	±20	15	90	0.4	0.75	0.75
SRN2009T-6R8M	6.8	±20	15	80	0.55	0.65	0.65
SRN2009T-100M	10	±20	15	60	1	0.55	0.6

#### **Electrical Schematic**



How to Order





#### **General Specifications**

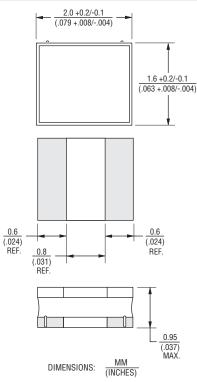
#### **Operating Temperature**

-40 °C to +125 °C				
(Temperature rise included)				
Storage Temperature (Component)				
-40 °C to +125 °C				
Temperature Rise40 °C at rated Irms				
Rated Current				
Inductance drops 30 % at Isat				
Malatura Osnalitudi I susl				

#### Materials

Core	Ferrite
Wire	Enameled copper
<b>Terminal Finish</b>	Sn
Coating	Magnetic epoxy resin
Packaging	2000 pcs. per 7-inch reel

#### **Product Dimensions**



\* 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.

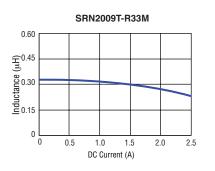
Users should verify actual device performance in their specific applications.

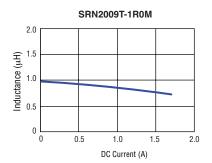
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# SRN2009T Series - Semi-shielded Power Inductors

### BOURNS

#### Inductance vs. Current





SRN2009T-3R3M 6.0 4.5 Inductance (µH) 3.0 1.5 0

0

0.3

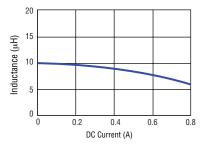


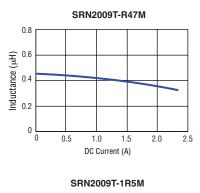
0.6

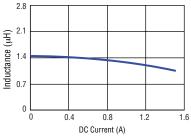
DC Current (A)

0.9

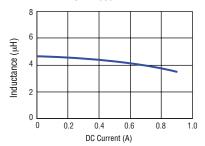
1.2

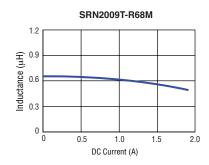




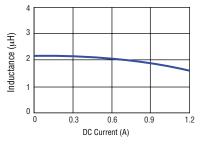








SRN2009T-2R2M



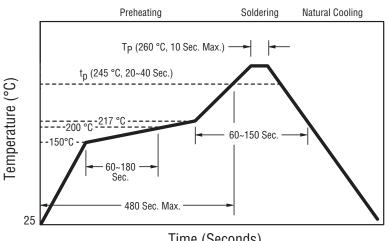
SRN2009T-6R8M 12 9 Inductance (µH) 6 3 0 0 0.2 0.4 0.6 0.8 DC Current (A)

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## SRN2009T Series - Semi-shielded Power Inductors

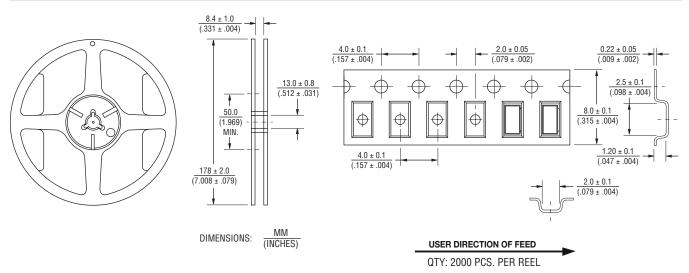
BOURNS

**Soldering Profile** 



Time (Seconds)

#### **Packaging Specifications**



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