

## **Features**

- Semi-shielded construction
- Inductance range: 0.6 to 100 µH
- Rated current up to 8 A
- AEC-Q200 compliant
- RoHS compliant\* and halogen free\*\*

## **Applications**

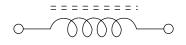
- DC/DC converters
- Power supplies

# SRN5040TA Series - Semi-shielded Power Inductors

## Electrical Specifications @ 25 °C

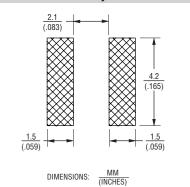
	Inductance @ 100 kHz / 1 V		Q @ 100 kHz	SRF (MHz)	DCR (Ω)	Irms (A)	Isat (A)
Bourns Part No.	<b>L (μH)</b>	Tol. %	Min.	Typ.	±20 %	Typ.	Typ.
SRN5040TA-R60M	0.60	±20	15	250	0.008	8.00	11.00
SRN5040TA-1R0M	1.0	±20	15	140	0.012	5.00	7.50
SRN5040TA-1R5M	1.5	±20	15	112	0.015	4.50	6.50
SRN5040TA-2R2M	2.2	±20	15	62	0.021	3.80	5.70
SRN5040TA-3R3M	3.3	±20	15	48	0.024	3.50	4.40
SRN5040TA-4R7M	4.7	±20	15	36	0.032	3.20	3.90
SRN5040TA-6R8M	6.8	±20	15	32	0.043	2.50	3.30
SRN5040TA-100M	10	±20	15	26	0.056	2.20	2.52
SRN5040TA-150M	15	±20	15	22	0.08	1.80	2.00
SRN5040TA-220M	22	±20	15	16	0.123	1.50	1.62
SRN5040TA-330M	33	±20	15	13	0.18	1.20	1.30
SRN5040TA-470K	47	±10	15	11	0.27	1.00	1.10
SRN5040TA-680K	68	±10	15	10	0.4	0.80	0.90
SRN5040TA-101K	100	±10	15	7	0.56	0.72	0.75

### **Electrical Schematic**



### **How to Order**

## **Recommended Layout**



## **General Specifications**

Operating Temperature

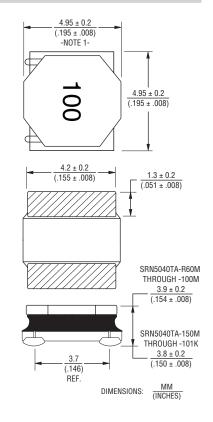
.....-55 °C to +125 °C (Temperature rise included) Storage Temperature (Component)

 $^{-55}\,^{\circ}\mathrm{C}$  to +125  $^{\circ}\mathrm{C}$  Temperature Rise .....40  $^{\circ}\mathrm{C}$  at rated Irms

## **Materials**

Core ......Ferrite
Wire ......Enameled copper
Terminal Finish ......Sn
Coating .....Magnetic epoxy resin
Packaging .... 1500 pcs. per 13-inch reel

#### **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.

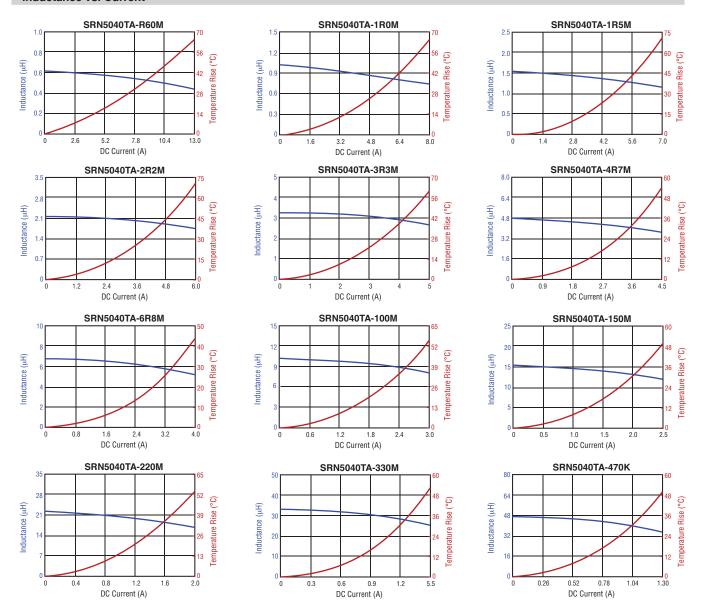
Specifications are subject to change without notice. Users should verify actual device performance in their specific applications.

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# **SRN5040TA Series - Semi-shielded Power Inductors**

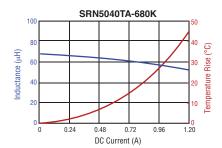
## BOURNS

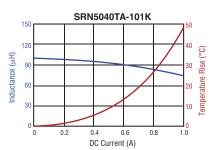
## Inductance vs. Current



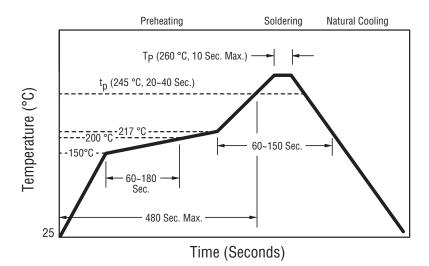
# **SRN5040TA Series - Semi-shielded Power Inductors**

## **Inductance vs. Current (Continued)**





## **Soldering Profile**

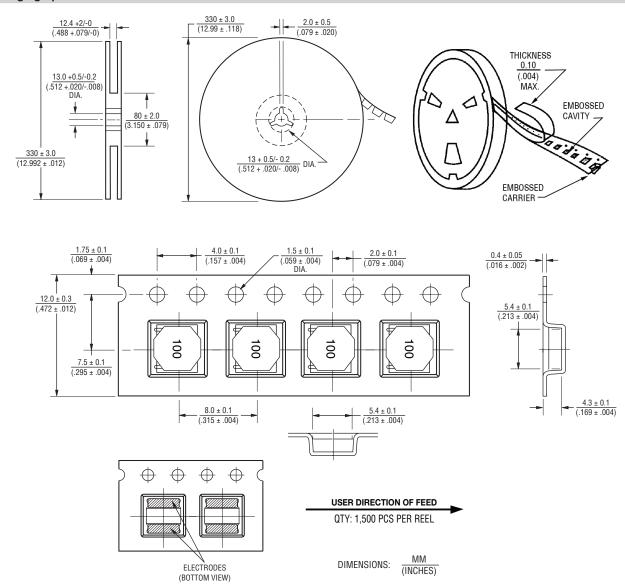


Reflow 3 times max.

# **SRN5040TA Series - Semi-shielded Power Inductors**

## BOURNS

## **Packaging Specifications**



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