



**THE DATASHEET OF
SRN5040TA-1R0M**





Features

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

Applications

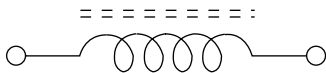
- DC/DC converters
- Power supplies

SRN5040TA Series - Semi-shielded Power Inductors

Electrical Specifications @ 25 °C

Bourns Part No.	Inductance @ 100 kHz / 1 V		Q @ 100 kHz Min.	SRF (MHz) Typ.	DCR (Ω) ± 20 %	I _{rms} (A) Typ.	I _{sat} (A) Typ.
	L (μ H)	Tol. %					
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

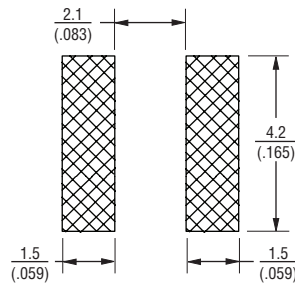


How to Order

SRN5040TA - 2R2M

Model _____
Value Code (see table) _____

Recommended Layout



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

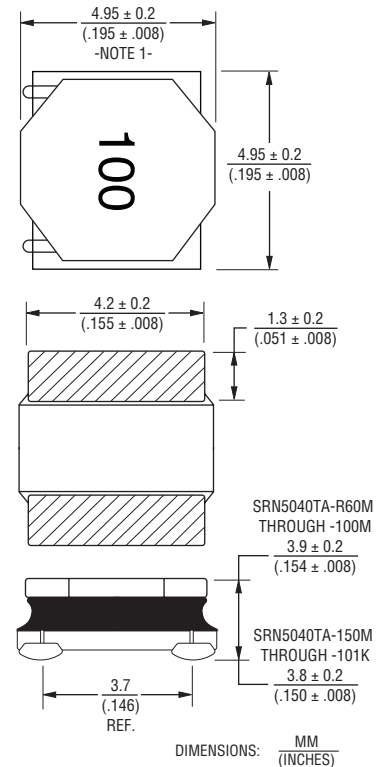
General Specifications

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

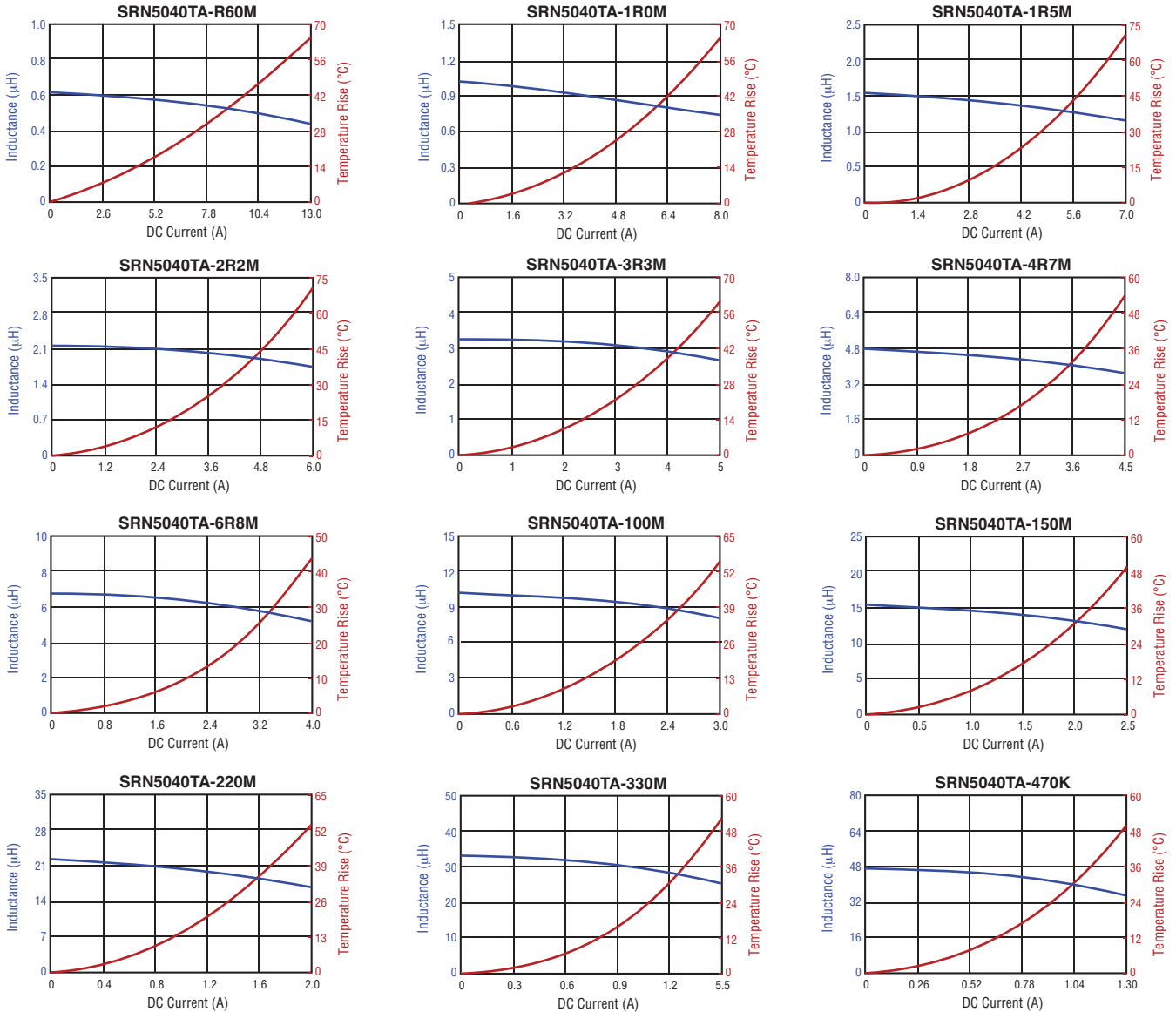
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SRN5040TA Series - Semi-shielded Power Inductors



Inductance vs. Current



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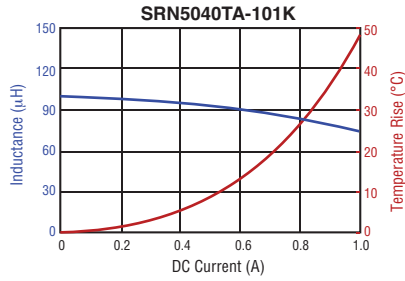
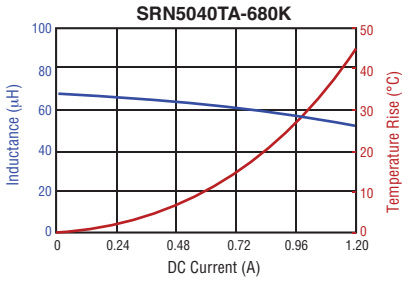
Users should verify actual device performance in their specific applications.

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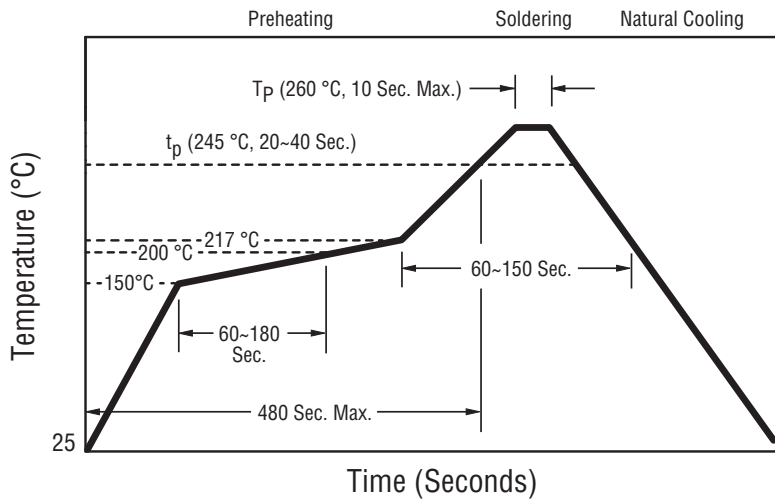
SRN5040TA Series - Semi-shielded Power Inductors

BOURNS®

Inductance vs. Current (Continued)



Soldering Profile



Reflow 3 times max.

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