



Features

- Semi-shielded construction
- Inductance range: 1 to 47 μ H
- Rated current up to 4.1 A
- AEC-Q200 compliant
- RoHS compliant* and halogen free**

Applications

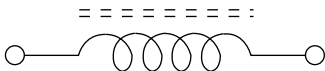
- DC/DC converters
- Power supplies

SRN5020TA 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. %					
SRN5020TA-1R0Y	1.0	± 30	15	143	0.02	4.10	5.00
SRN5020TA-1R2Y	1.2	± 30	15	132	0.02	3.80	4.80
SRN5020TA-1R5Y	1.5	± 30	15	112	0.025	3.50	4.50
SRN5020TA-2R2M	2.2	± 20	15	86	0.032	3.30	4.10
SRN5020TA-3R3M	3.3	± 20	15	75	0.043	2.80	3.50
SRN5020TA-4R7M	4.7	± 20	15	58	0.06	2.40	2.70
SRN5020TA-5R6M	5.6	± 20	15	50	0.069	2.10	2.40
SRN5020TA-6R8M	6.8	± 20	15	46	0.09	1.90	2.10
SRN5020TA-8R2M	8.2	± 20	15	43	0.098	1.75	1.90
SRN5020TA-100M	10	± 20	15	41	0.11	1.60	1.70
SRN5020TA-120M	12	± 20	15	36	0.135	1.40	1.40
SRN5020TA-150M	15	± 20	15	32	0.165	1.25	1.30
SRN5020TA-180M	18	± 20	15	28	0.19	1.17	1.20
SRN5020TA-220M	22	± 20	15	25	0.225	1.10	1.10
SRN5020TA-330M	33	± 20	15	20	0.335	0.80	0.80
SRN5020TA-470M	47	± 20	15	16	0.46	0.70	0.70

Electrical Schematic

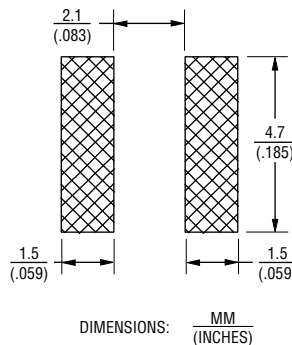


How to Order

SRN5020TA - 2R2M

Model _____
Value Code (see table) _____

Recommended Layout



BOURNS®

Americas: Tel: +1 951-781-5500

Email: americus@bourns.com

Mexico: Tel: +52-614-478-0400

Email: mexicus@bourns.com

Asia: Tel: +886-2-2562-4117

Email: asiacus@bourns.com

EMEA: Tel: +36 88 885 877

Email: euocus@bourns.com

www.bourns.com



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. The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at www.bourns.com/docs/legal/disclaimer.pdf.

Additional Information

Click these links for more information:



[PRODUCT SELECTOR](#) [TECHNICAL LIBRARY](#) [INVENTORY](#) [SAMPLES](#) [CONTACT](#)

General Specifications

Operating Temperature

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

Storage Temperature (Component)

..... -55 °C to +125 °C

Temperature Rise40 °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

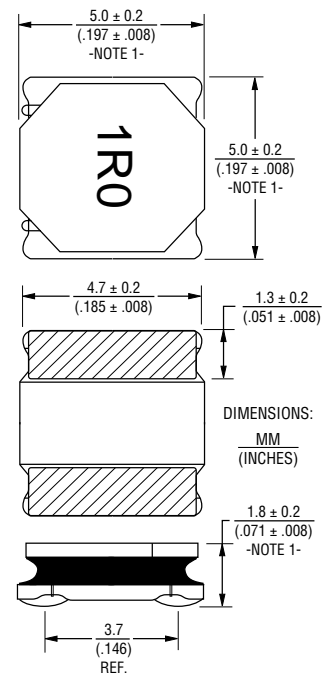
Wire Enameled copper

Terminal Finish Sn

Coating Magnetic epoxy resin

Packaging..... 2500 pcs. per 13-inch reel

Product Dimensions

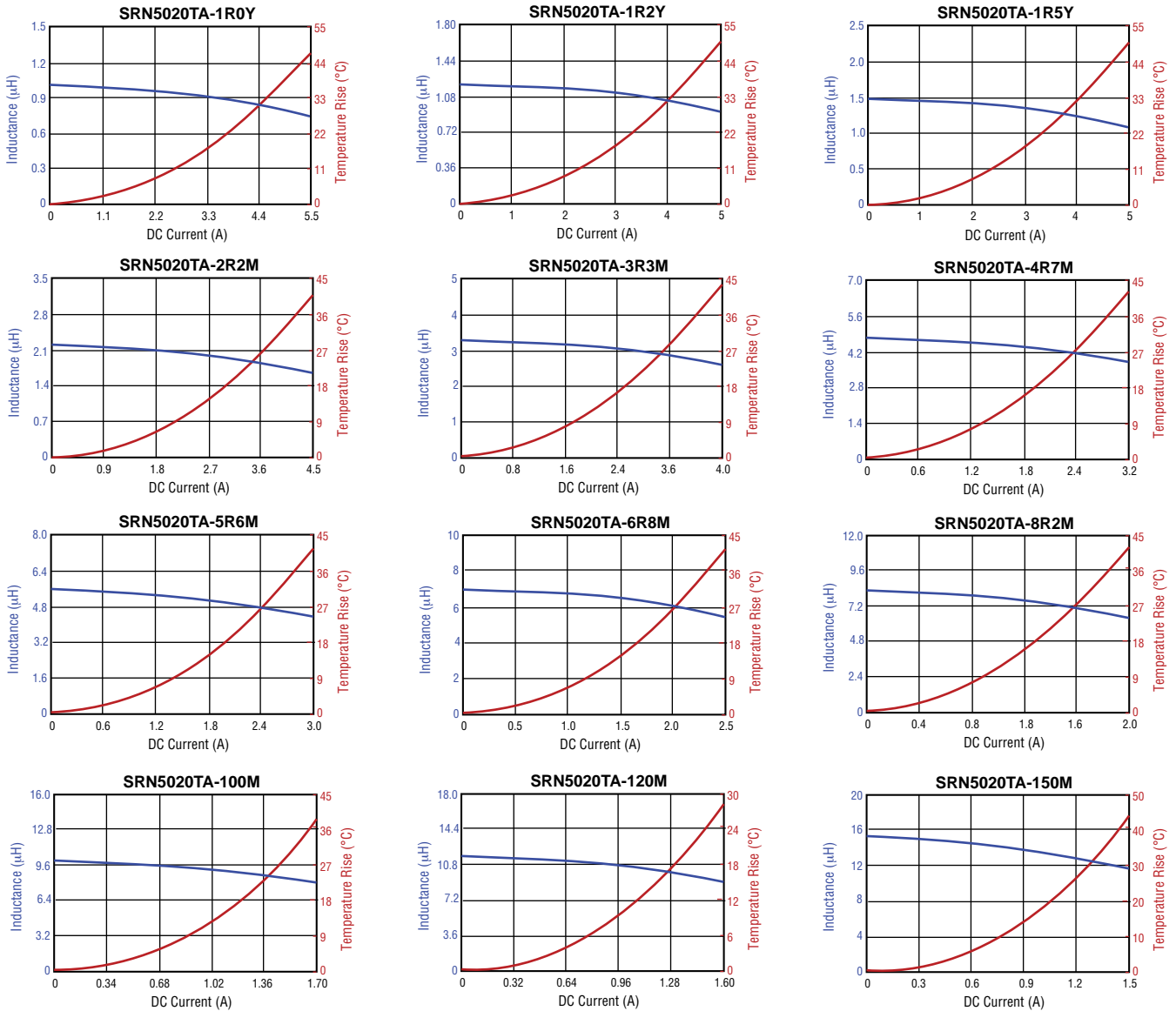


NOTE 1: DIMENSIONS DO NOT INCLUDE THE TERMINATION. FOR MAXIMUM OVERALL DIMENSIONS WITH TERMINATION, ADD 0.1 MM (.004 IN.).

SRN5020TA Series – Semi-shielded Power Inductors



Inductance vs. Current



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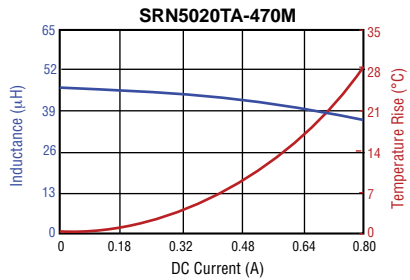
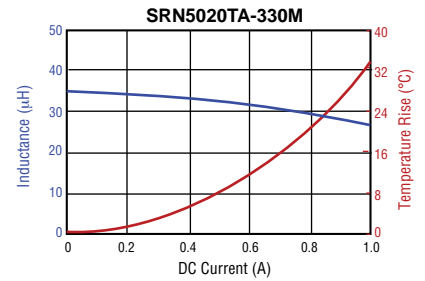
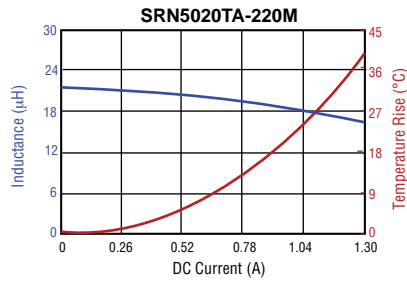
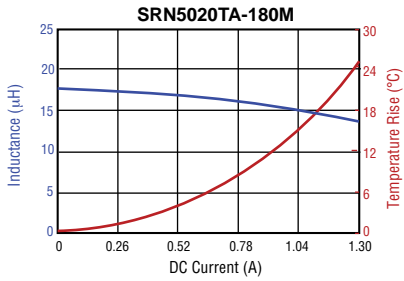
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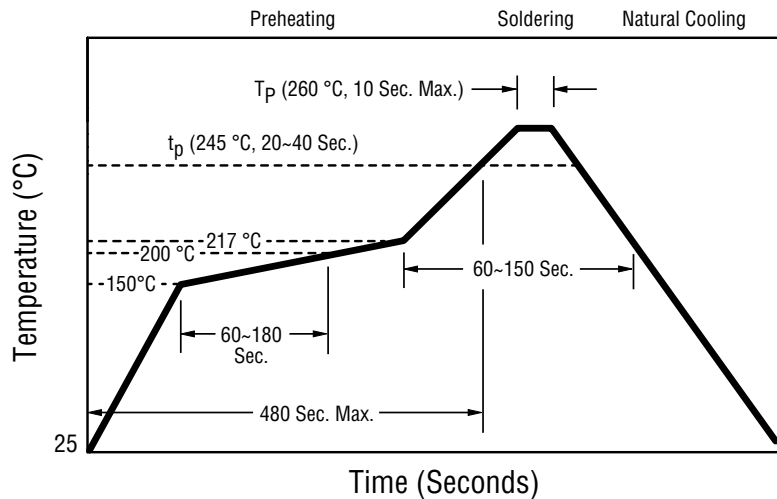
SRN5020TA Series – Semi-shielded Power Inductors



Inductance vs. Current (Continued)



Soldering Profile

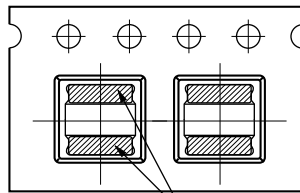
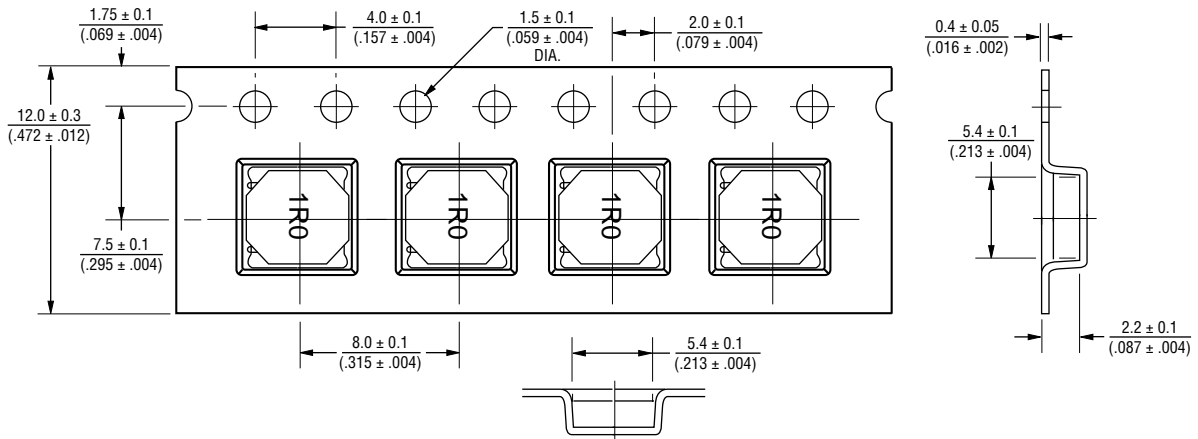
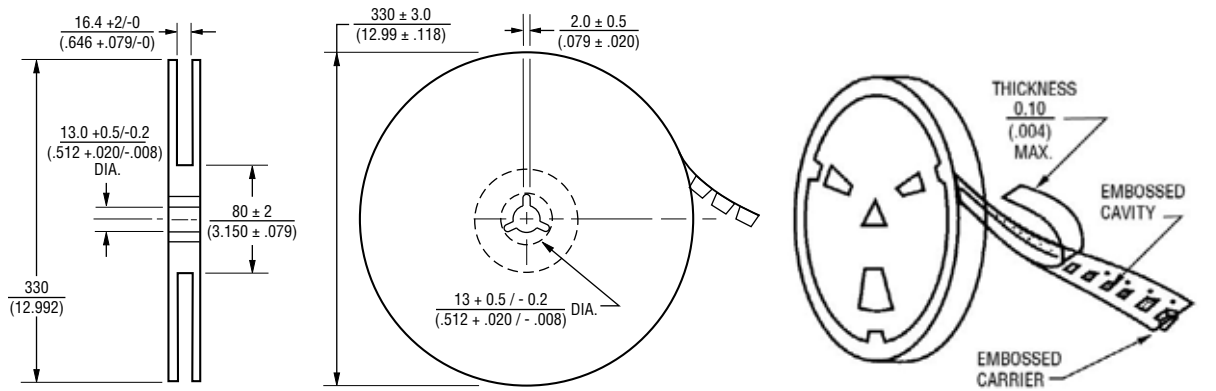


Reflow 3 times max.

SRN5020TA Series – Semi-shielded Power Inductors

BOURNS®

Packaging Specifications



ELECTRODES
(BOTTOM VIEW)

USER DIRECTION OF FEED
QTY: 2,500 PCS PER REEL

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

REV. 06/24

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