

Features

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

Applications

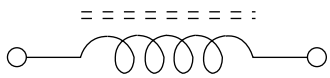
- DC/DC converters
- Power supplies

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 %	Irms (A) Typ.	Isat (A) Typ.
	L (µH)	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



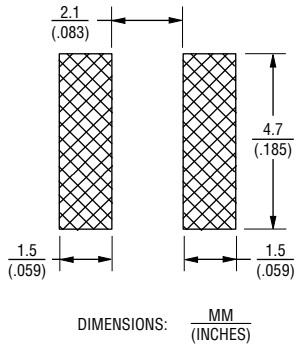
How to Order

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: eurocus@bourns.com

www.bourns.com

Additional Information

Click these links for more information:

PRODUCT SELECTOR | TECHNICAL LIBRARY | INVENTORY | SAMPLES | CONTACT

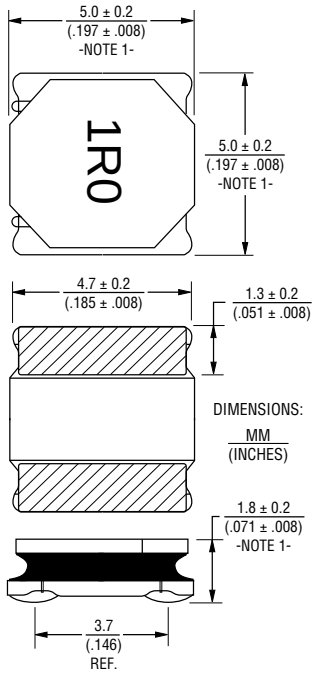
General Specifications

Operating Temperature
..... -55 °C to +125 °C
(Temperature rise included)
Storage Temperature (Component)
..... -55 °C to +125 °C
Temperature Rise .....40 °C at rated Irms
Rated Current
..... Inductance drops 30 % at Isat
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.).

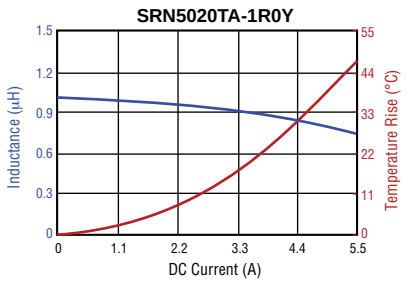
WARNING Cancer and Reproductive Harm www.P65Warnings.ca.gov

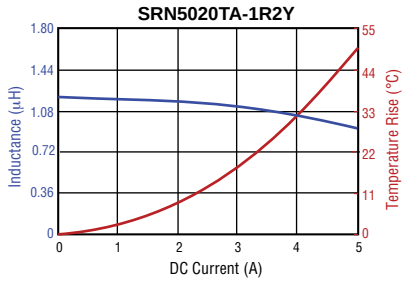
* RoHS Directive 2015/863, Mar 31, 2015 and Annex.
** Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

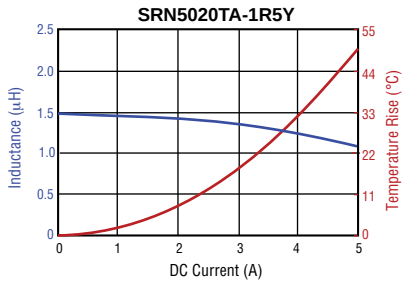
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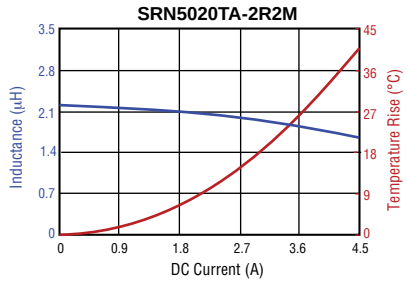
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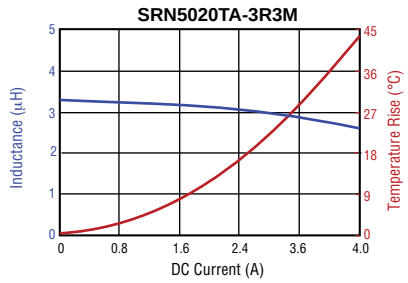
Inductance vs. Current

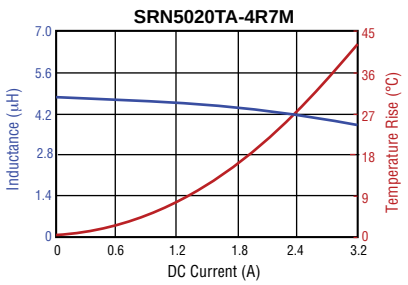


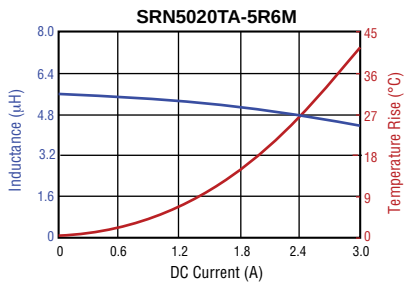


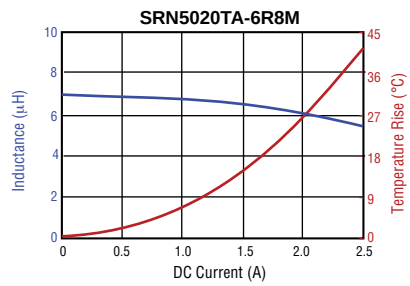


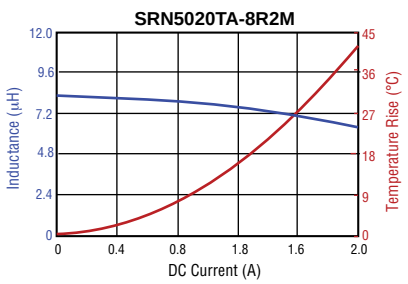


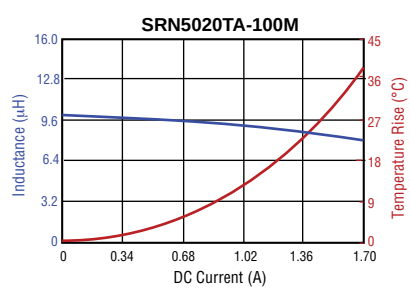


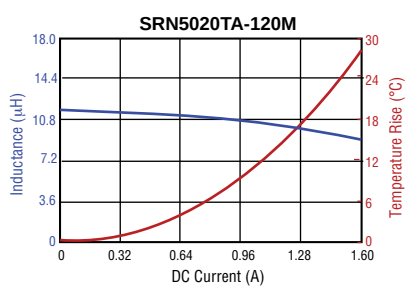


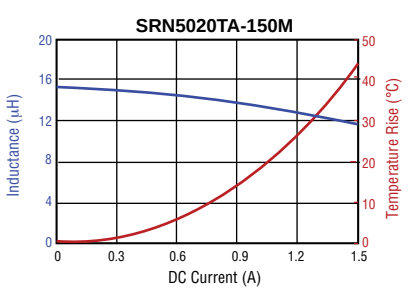








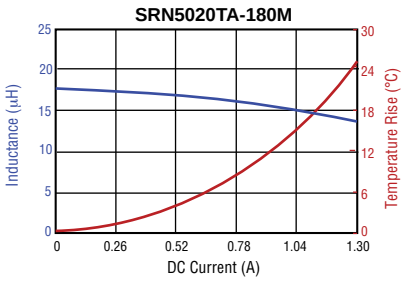


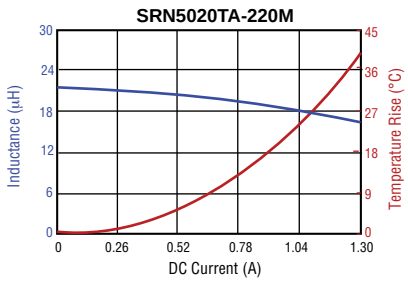


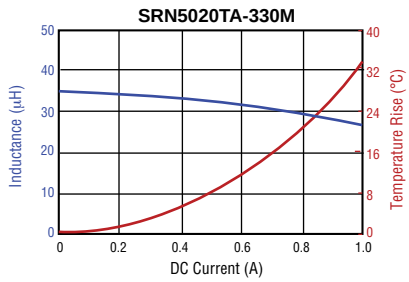
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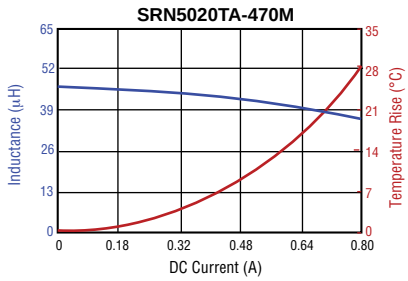
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Inductance vs. Current (Continued)

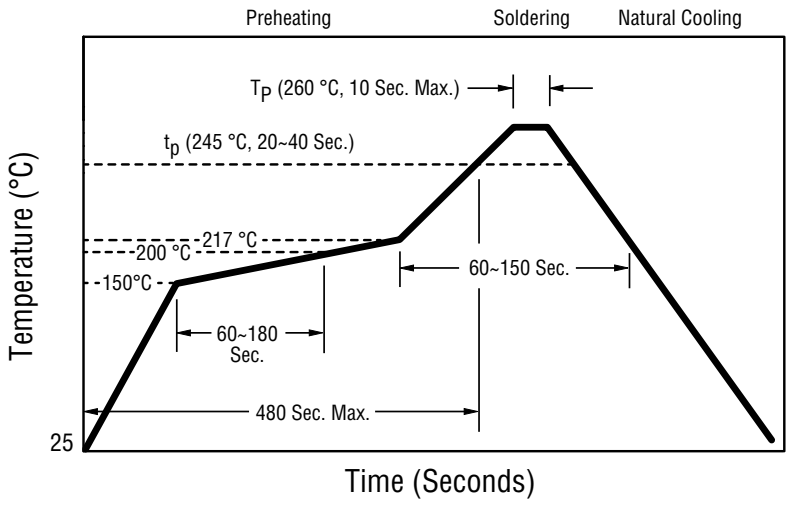








Soldering Profile

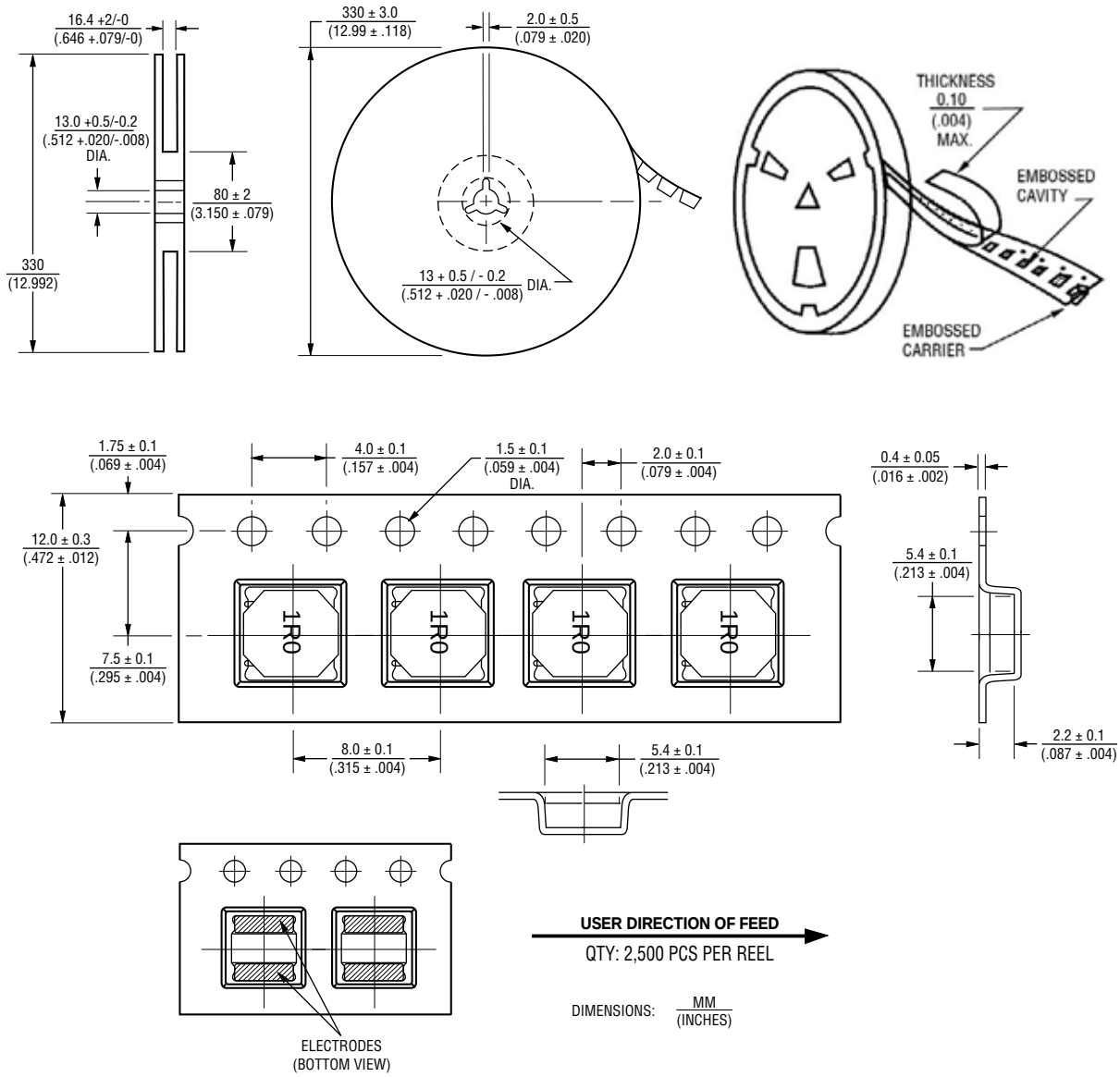


Reflow 3 times max.

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Packaging Specifications



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