

Features

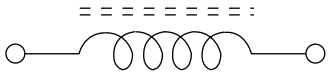
- Semi-shielded construction
- Inductance range: 0.5 to 330 µH
- Rated current up to 12 A
- AEC-Q200 compliant
- RoHS compliant* and halogen free**

SRN8040TA Series - Semi-shielded Power Inductors

Electrical Specifications @ 25 °C

Bourns Part No.	Inductance @ 1 MHz / 1 V L (µH)	Tol. %	Q (Min.) @ 1 MHz	SRF (MHz) Typ.	DCR (mΩ) ±20 %	Irms (A) Typ.	Isat (A) Typ.
SRN8040TA-R50Y	0.5	± 30	20	165	5.5	12.00	17.00
SRN8040TA-1R0Y	1.0	± 30	15	85	8.2	8.50	13.80
SRN8040TA-1R4Y	1.4	± 30	15	78	10	8.20	11.80
SRN8040TA-1R5Y	1.5	± 30	15	66	10	8.00	11.50
SRN8040TA-2R0Y	2.0	± 30	15	61	11	7.50	10.20
SRN8040TA-2R2Y	2.2	± 30	15	57	11.5	7.40	9.80
SRN8040TA-3R3Y	3.3	± 30	15	48	15	6.60	8.00
SRN8040TA-4R7M	4.7	± 20	15	38	19.5	5.80	6.70
SRN8040TA-5R6M	5.6	± 20	15	33	22	5.40	6.20
SRN8040TA-6R8M	6.8	± 20	15	29	25	5.10	5.60
SRN8040TA-100M	10	± 20	15	25	33	4.60	5.00
SRN8040TA-150M	15	± 20	12	20	50	3.60	4.00
SRN8040TA-220M	22	± 20	12	18	73	2.90	3.10
SRN8040TA-330M	33	± 20	12	15	100	2.30	2.60
SRN8040TA-470M	47	± 20	12	12	135	2.00	2.20
SRN8040TA-560M	56	± 20	12	10.5	160	1.75	1.90
SRN8040TA-680M	68	± 20	12	9.5	205	1.65	1.75
SRN8040TA-820M	82	± 20	12	8.5	230	1.40	1.60
SRN8040TA-101M	100	± 20	10	8	300	1.20	1.45
SRN8040TA-121M	120	± 20	10	7.5	350	1.10	1.30
SRN8040TA-151M	150	± 20	10	7	410	0.98	1.20
SRN8040TA-181M	180	± 20	10	6.5	490	0.91	1.04
SRN8040TA-221M	220	± 20	10	5.5	610	0.85	0.99
SRN8040TA-331M	330	± 20	10	5	850	0.70	0.75

Electrical Schematic



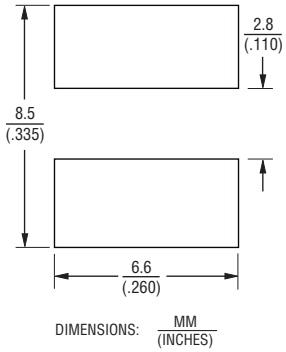
How to Order

SRN8040TA - 100M

Model

Value Code (see table)

Recommended Layout



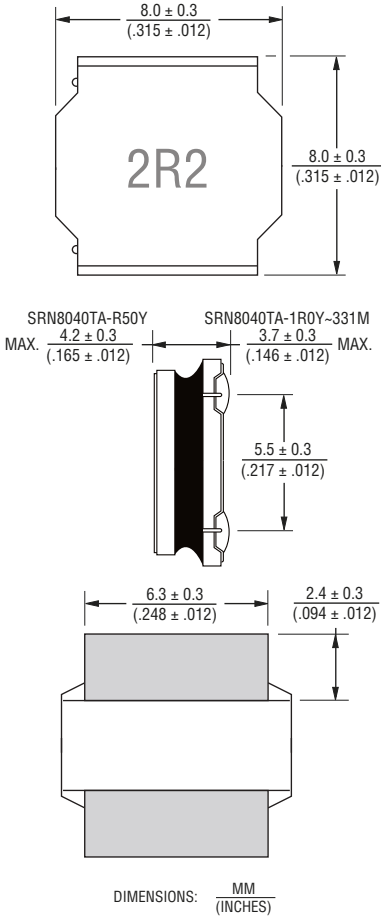
General Specifications

Operating Temp. ..... -55 °C to +125 °C
(Temperature rise included)
Storage Temperature .. -55 °C to +125 °C
Temperature Rise .....40 °C at rated Irms
Rated Current
..... Inductance drops 30 % at Isat
Failure In Time (FIT) .....24.7/10^9 hours
Mean Time Between Failures (MTBF)
.....40.4 x 10^6 hours
Moisture Sensitivity Level.....1
ESD Classification (HBM)..... N/A

Materials

Core.....Ferrite
Wire .....Enameled copper
Terminal Finish .....Sn
Coating .....Magnetic epoxy resin
Packaging..... 1000 pcs. per 13-inch reel

Product Dimensions



BOURNS®

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EMEA: Tel: +36 88 520 390 • Fax: +36 88 520 211
The Americas: Tel: +1-951 781-5500 • Fax: +1-951 781-5700
www.bourns.com

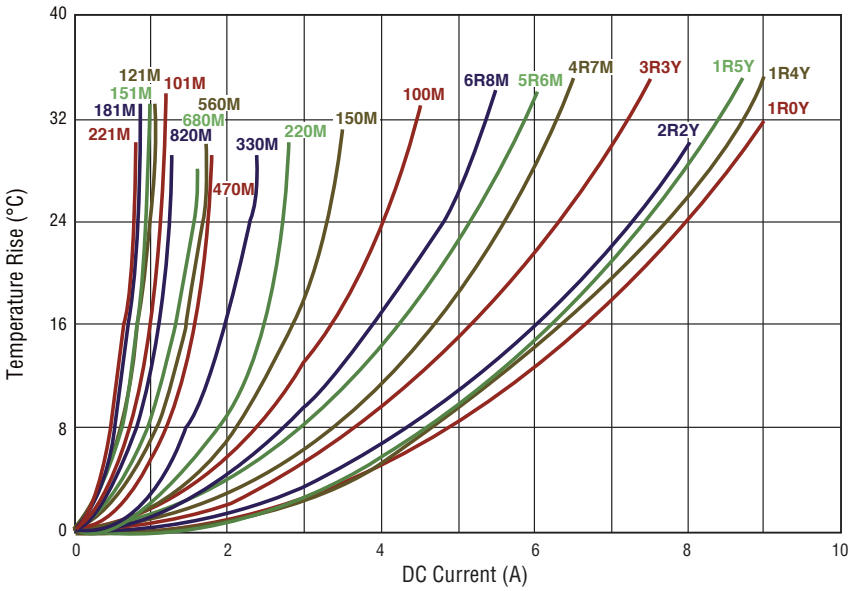
WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.
** 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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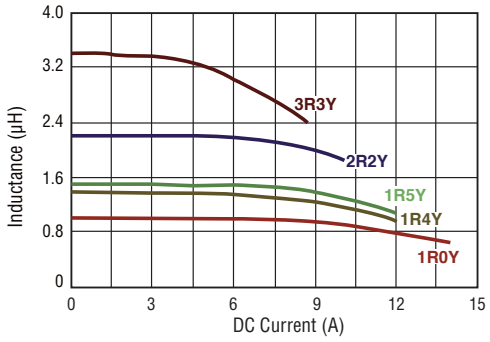
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Temperature Rise vs. Current

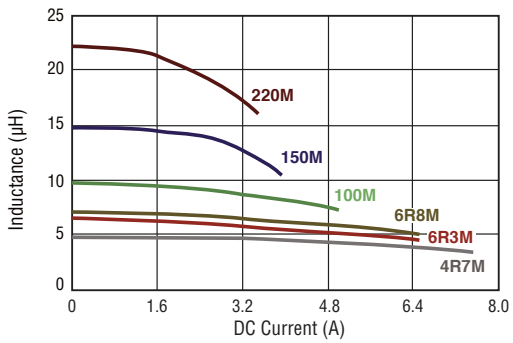


Inductance vs. Current

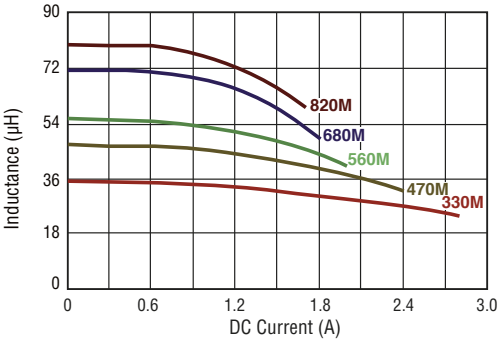
SRN8040TA-1R0Y ~ SRN8040TA-3R3Y



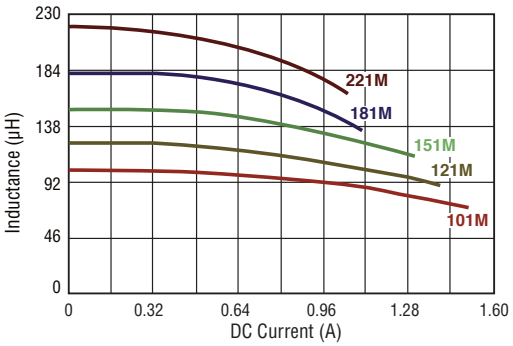
SRN8040TA-4R7M ~ SRN8040TA-220M



SRN8040TA-330M ~ SRN8040TA-820M



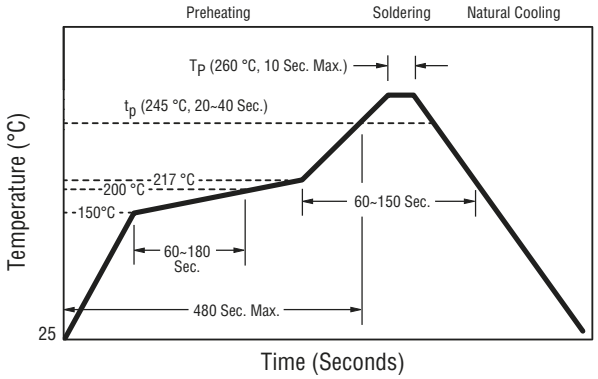
SRN8040TA-101M ~ SRN8040TA-221M



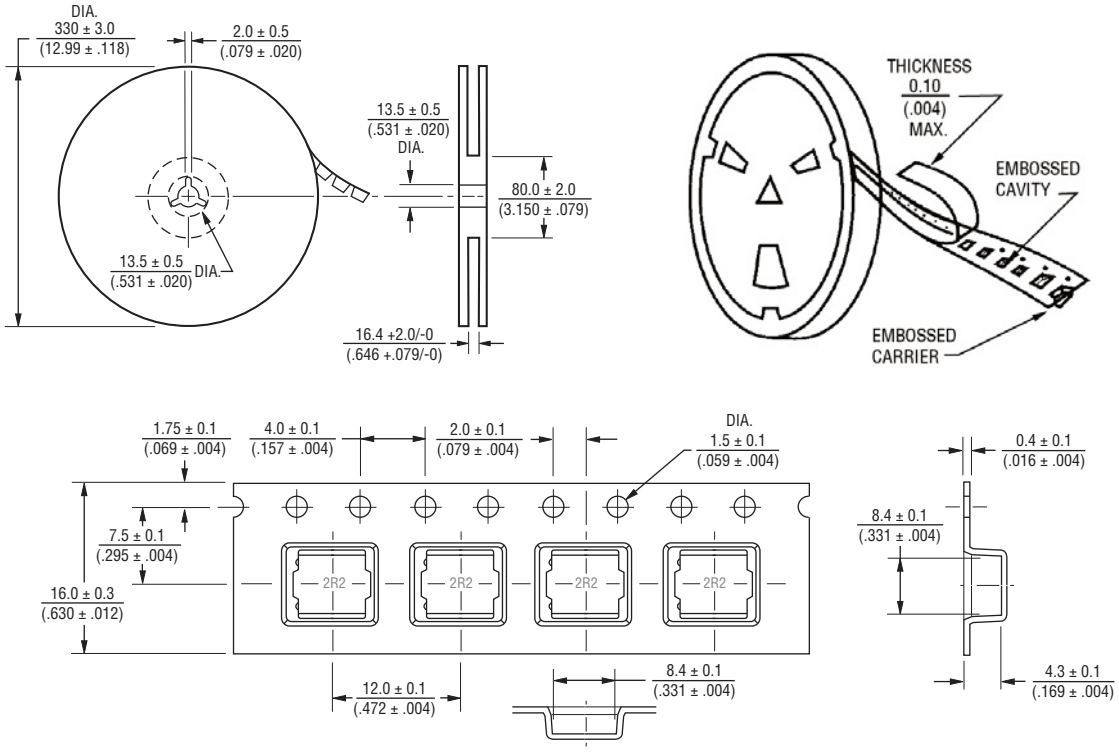
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Soldering Profile



Packaging Specifications



REV. 12/17

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