

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

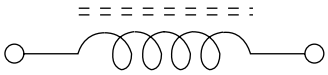
General Specifications

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

Electrical Schematic

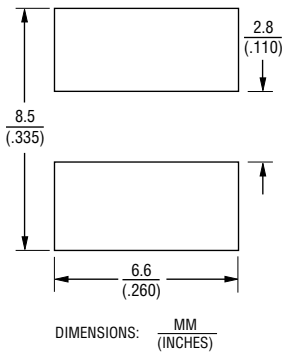


How to Order

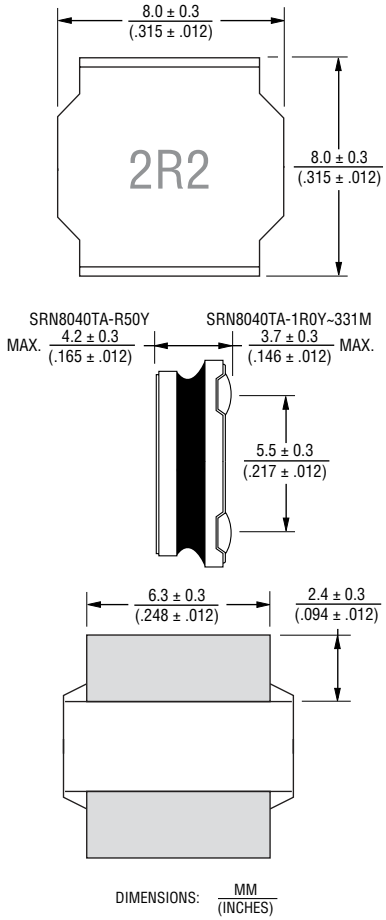
SRN8040TA - 100M

Model
Value Code (see table)

Recommended Layout



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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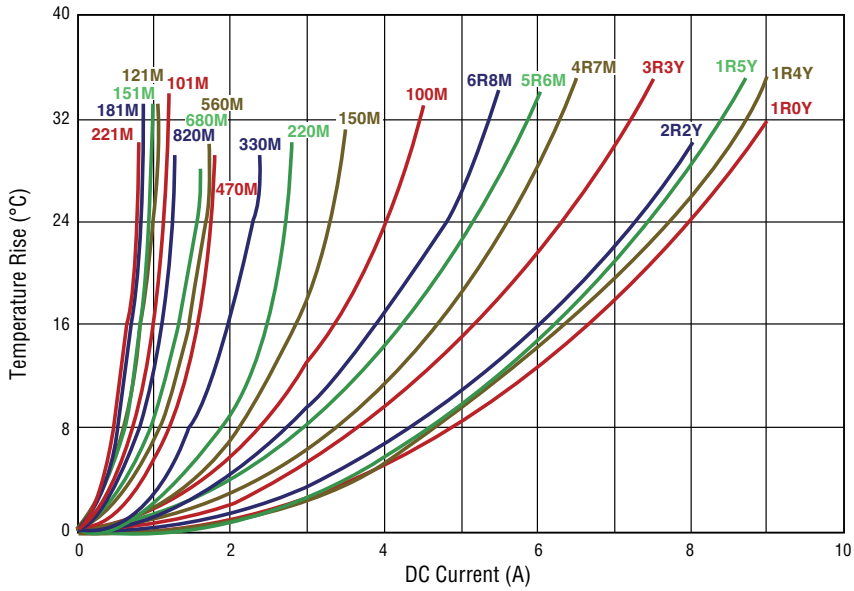
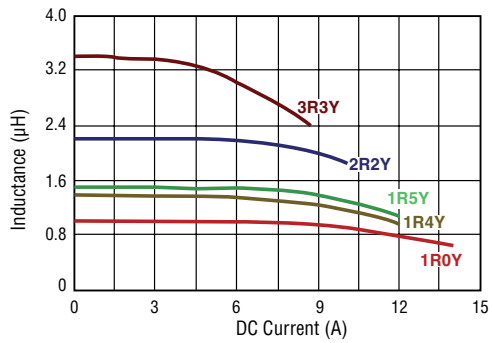
Temperature Rise vs. Current

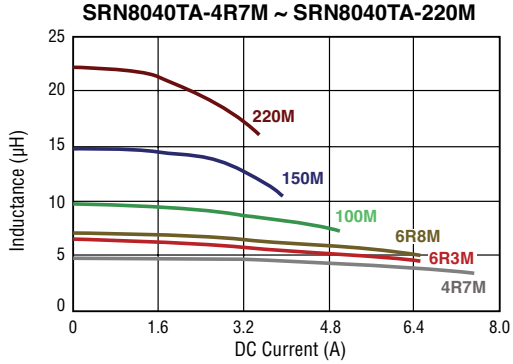


Inductance vs. Current

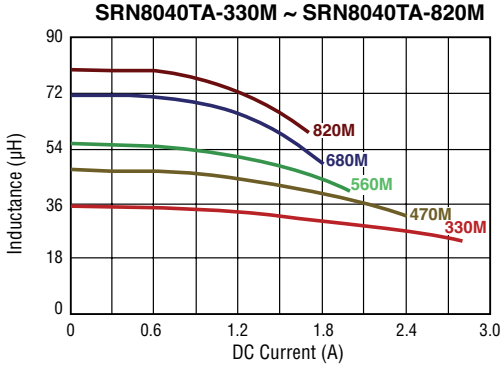
SRN8040TA-1R0Y ~ SRN8040TA-3R3Y



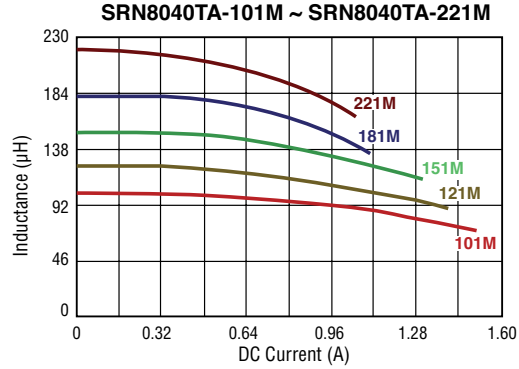
SRN8040TA-4R7M ~ SRN8040TA-220M



SRN8040TA-330M ~ SRN8040TA-820M



SRN8040TA-101M ~ SRN8040TA-221M



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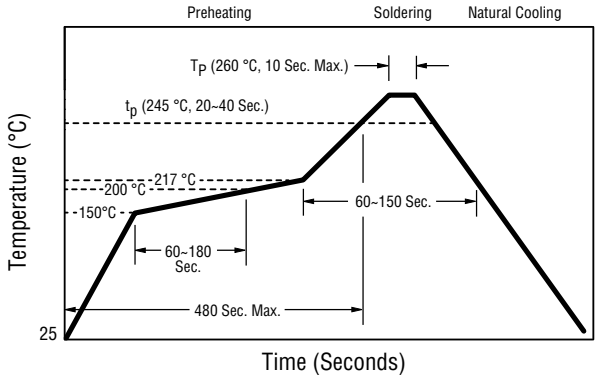
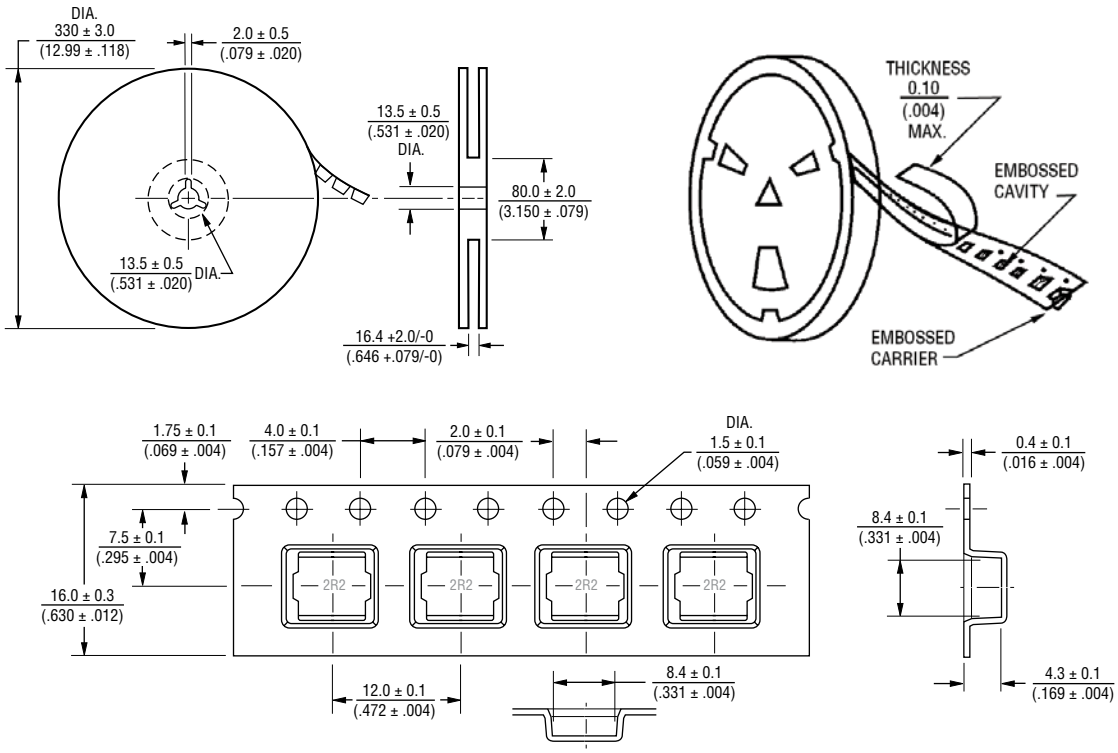
Soldering Profile



Packaging Specifications



REV. 06/19

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