Features

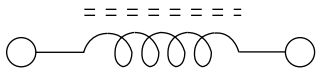
- Semi-shielded construction
- High operating temperature
- AEC-Q200 compliant
- RoHS compliant* and halogen free**

SRN8040HA Series - Semi-shielded Power Inductors

Electrical Specifications @ 25 °C

Bourns Part No.	Inductance @ 100 kHz / 1 V		Q Typ. @ 1 MHz	SRF (MHz) Typ.	DCR (mΩ) Typ.	DCR (mΩ) Max.	Irms (A) Typ.	Isat (A) Typ.
	L (µH)	Tol. %						
SRN8040HA-R50Y	0.5	30	15	110	5.0	7.0	10.0	15.0
SRN8040HA-1R0M	1.0	20	15	85	6.9	10.0	8.5	13.8
SRN8040HA-1R5M	1.5	20	15	55	8.0	11.0	7.0	12.0
SRN8040HA-2R2M	2.2	20	14	43	11.0	14.0	6.3	10.5
SRN8040HA-2R7M	2.7	20	14	37	16.0	21.0	5.6	9.0
SRN8040HA-3R6M	3.6	20	13	34	18.0	24.0	4.9	8.0
SRN8040HA-4R7M	4.7	20	13	29	24.0	30.0	4.1	7.0
SRN8040HA-6R8M	6.8	20	12	23	33.0	42.0	3.9	5.5
SRN8040HA-8R2M	8.2	20	11	22	37.0	48.0	3.7	5.2
SRN8040HA-100M	10.0	20	11	20	47.0	61.0	3.1	4.8
SRN8040HA-150M	15.0	20	10	15	66.0	86.0	2.4	3.7
SRN8040HA-220M	22.0	20	10	12	92.0	120.0	2.2	3.3
SRN8040HA-330M	33.0	20	8.5	10	133.0	166.0	1.7	2.6
SRN8040HA-470M	47.0	20	8.5	8.5	190.0	237.0	1.4	2.2
SRN8040HA-680M	68.0	20	8.0	7.0	268.0	337.0	1.1	1.7
SRN8040HA-101M	100.0	20	8.0	6.0	383.0	479.0	1.0	1.3

Electrical Schematic



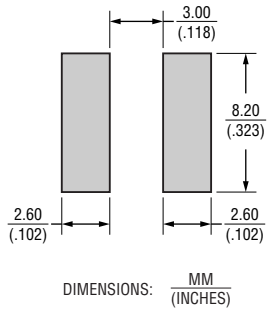
How to Order

SRN8040HA - 1R0M

Model

Value Code (see table)

Recommended Layout



Additional Information

Click these links for more information:

PRODUCT SELECTOR | TECHNICAL LIBRARY | INVENTORY | SAMPLES | CONTACT

General Specifications

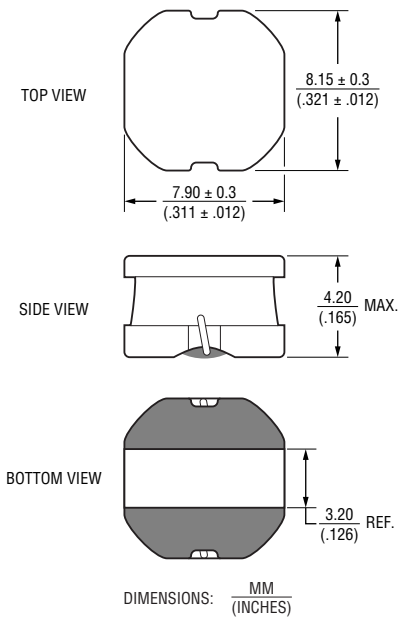
Operating Temperature ..... -40 °C to +150 °C
(Temperature rise included)
Storage Temperature (Component) ..... -40 °C to +150 °C
Temperature Rise ... 40 °C at rated Irms[1]
Rated Current ..... Inductance drops 30 % at Isat
Moisture Sensitivity Level 1
ESD Classification (HBM) ..... N/A

[1] Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

Materials

Core ..... Ferrite
Wire ..... Enameled copper
Terminal Finish ..... Ag/Ni/Sn
Coating ..... Magnetic silica
Packaging ..... 1000 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.

Specifications are subject to change without notice.
Users should verify actual device performance in their specific applications.
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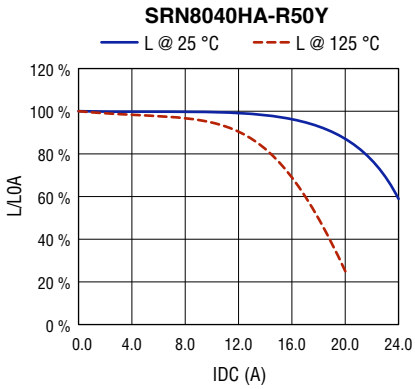
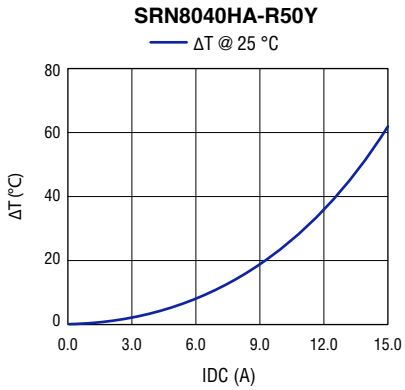
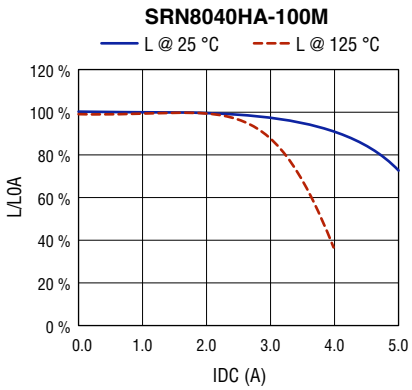
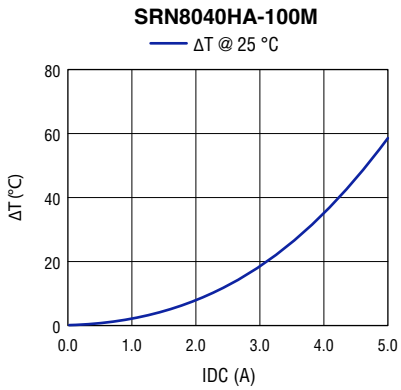
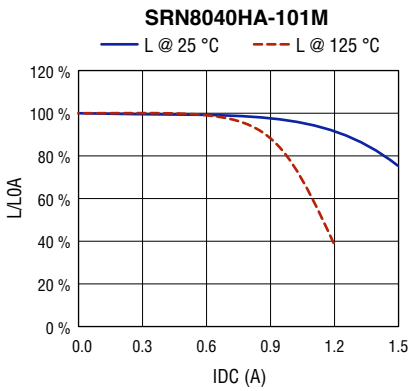
Inductance vs. IDC and Temperature Rise vs. IDC

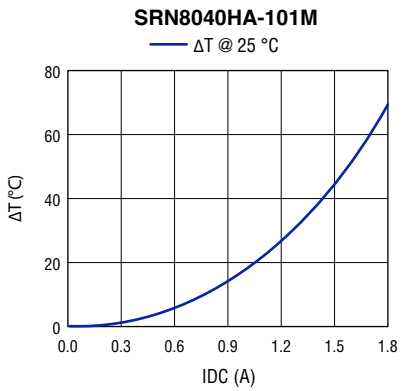




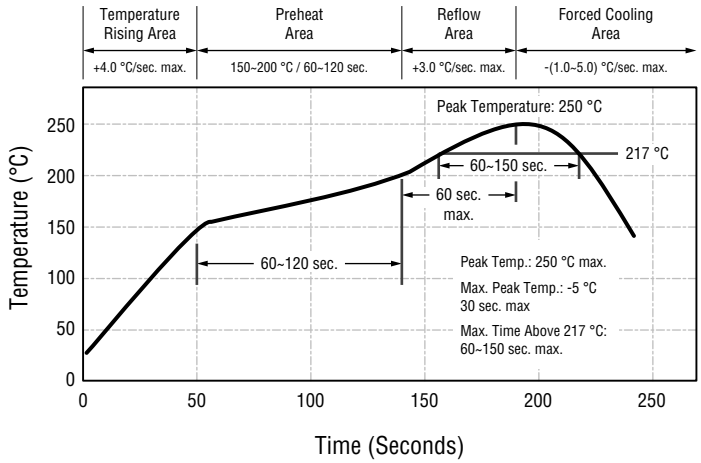








Soldering Profile



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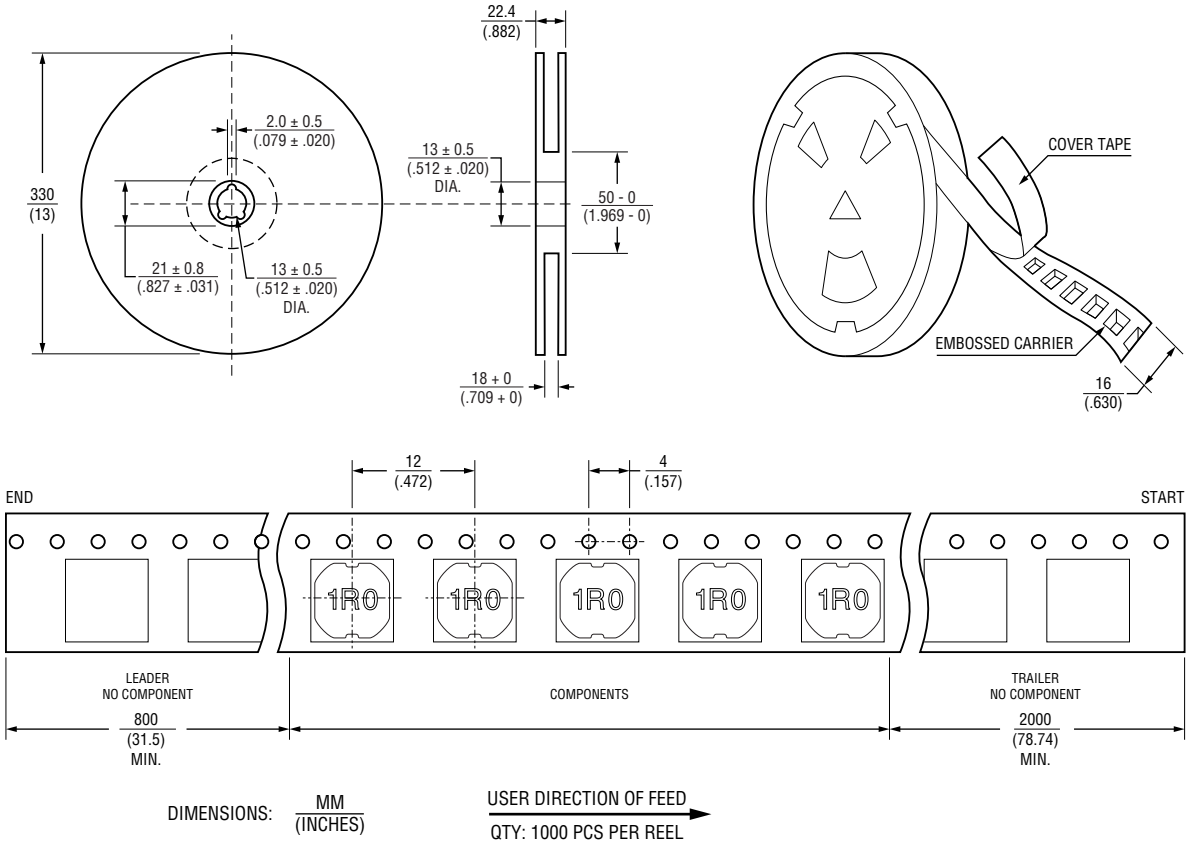
Packaging Specifications



REV. 06/23

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