

Features

- Semi-shielded construction
- Inductance range: 1 to 470 µH
- Rated current up to 8 A
- AEC-Q200 compliant
- RoHS compliant* and halogen free**

Additional Information

Click these links for more information:

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SRN6045TA 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.
SRN6045TA-1R0Y	1.0	± 30	15	110	10	8.00	13.50
SRN6045TA-1R2Y	1.2	± 30	15	90	10.5	7.50	12.5
SRN6045TA-1R5Y	1.5	± 30	15	75	11.7	7.00	12.0
SRN6045TA-2R2Y	2.2	± 30	15	55	15	6.00	9.50
SRN6045TA-3R3Y	3.3	± 30	15	45	21	5.00	7.80
SRN6045TA-3R6Y	3.6	± 30	15	42	22.5	4.90	7.40
SRN6045TA-4R7M	4.7	± 20	15	40	26	4.50	6.80
SRN6045TA-6R3M	6.3	± 20	15	35	33	3.80	5.90
SRN6045TA-6R8M	6.8	± 20	15	30	34	3.60	5.70
SRN6045TA-8R2M	8.2	± 20	15	27	46	3.40	5.10
SRN6045TA-100M	10	± 20	15	25	52	3.20	4.60
SRN6045TA-120M	12	± 20	15	22	65	3.00	4.00
SRN6045TA-150M	15	± 20	15	20	71	2.80	3.80
SRN6045TA-220M	22	± 20	15	17	96	2.30	3.30
SRN6045TA-330M	33	± 20	15	13	145	1.80	2.50
SRN6045TA-470M	47	± 20	15	12	200	1.60	2.00
SRN6045TA-560M	56	± 20	15	11	230	1.40	1.80
SRN6045TA-680M	68	± 20	15	10	305	1.10	1.60
SRN6045TA-820M	82	± 20	15	9	365	0.98	1.50
SRN6045TA-101M	100	± 20	15	8.5	456	0.92	1.33
SRN6045TA-121M	120	± 20	15	7	500	0.85	1.20
SRN6045TA-151M	150	± 20	15	6.5	626	0.75	1.10
SRN6045TA-181M	180	± 20	15	6	745	0.68	1.00
SRN6045TA-221M	220	± 20	15	5	900	0.60	0.88
SRN6045TA-331K	330	± 10	15	4	1400	0.55	0.60
SRN6045TA-471K	470	± 10	15	3	2050	0.40	0.50

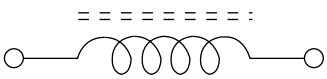
General Specifications

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.....N/A

Materials

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

Electrical Schematic

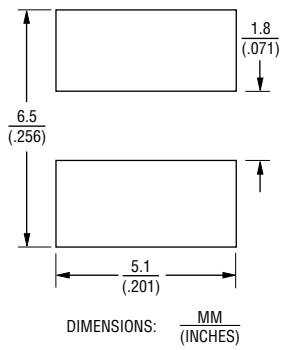


How to Order

SRN6045TA - 100M

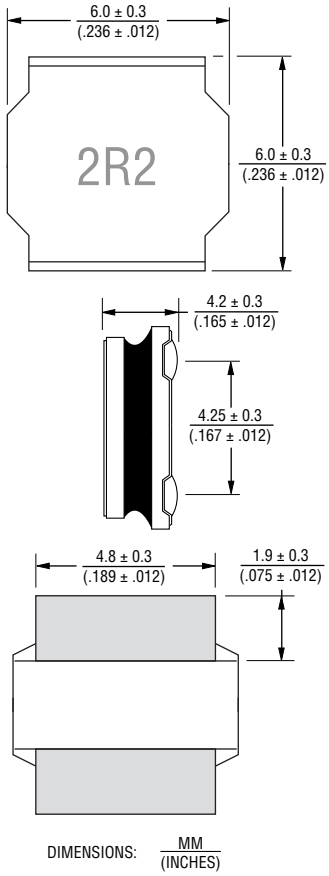
Model
Value Code (see table)

Recommended Layout



DIMENSIONS: MM (INCHES)

Product Dimensions



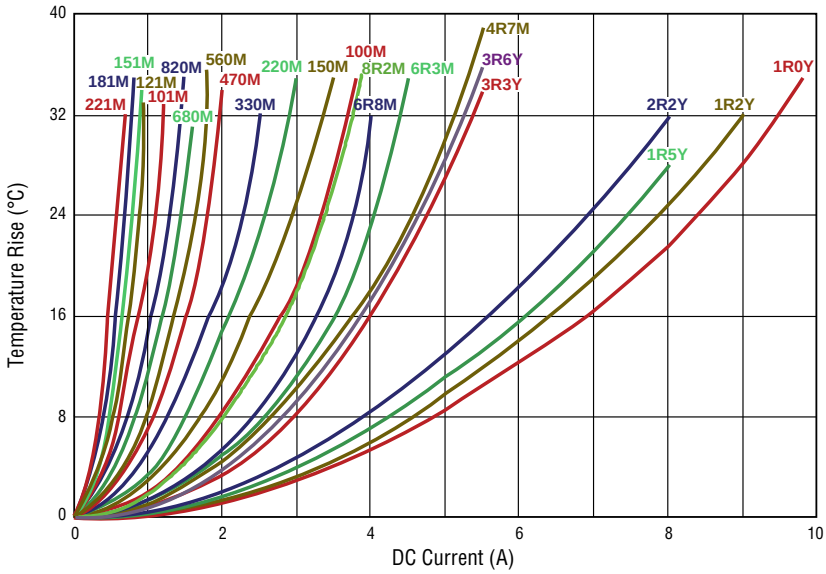
DIMENSIONS: MM (INCHES)

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.

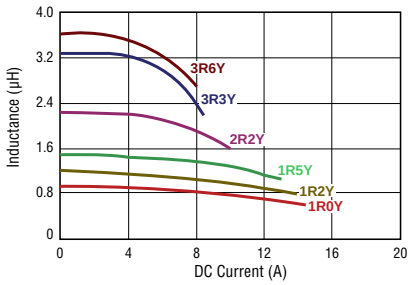
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Temperature Rise vs. Current

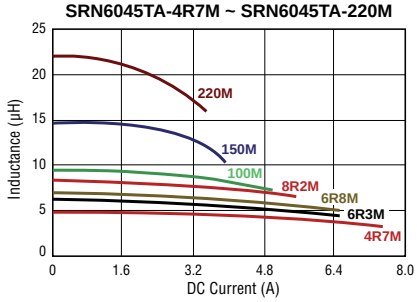


Inductance vs. Current

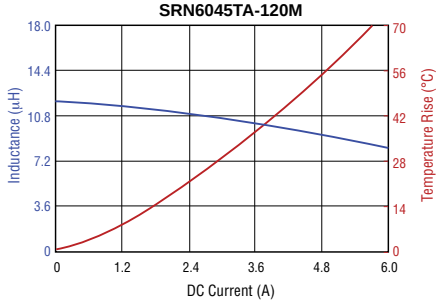
SRN6045TA-1R0Y ~ SRN6045TA-3R6Y



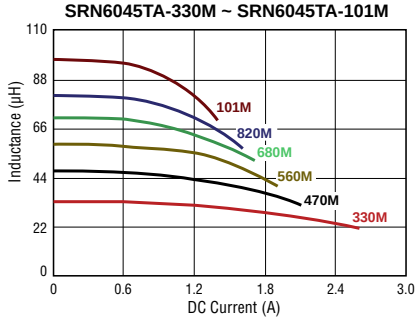
SRN6045TA-4R7M ~ SRN6045TA-220M



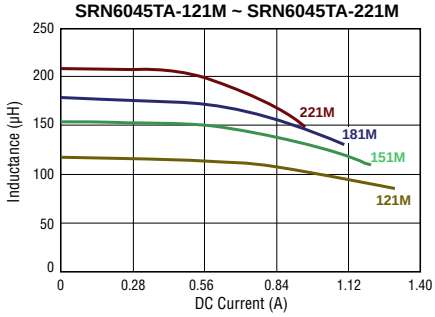
SRN6045TA-120M



SRN6045TA-330M ~ SRN6045TA-101M

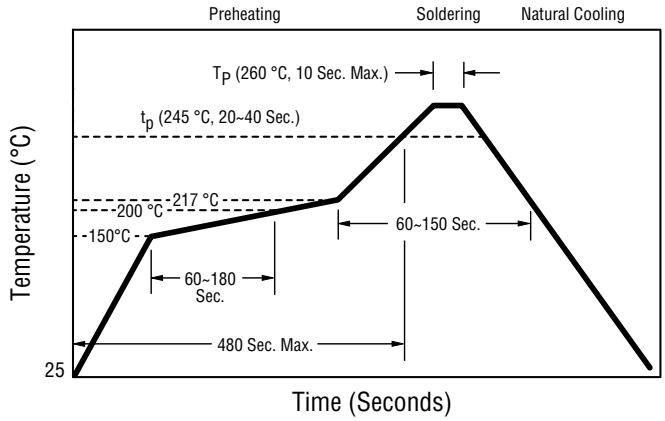


SRN6045TA-121M ~ SRN6045TA-221M

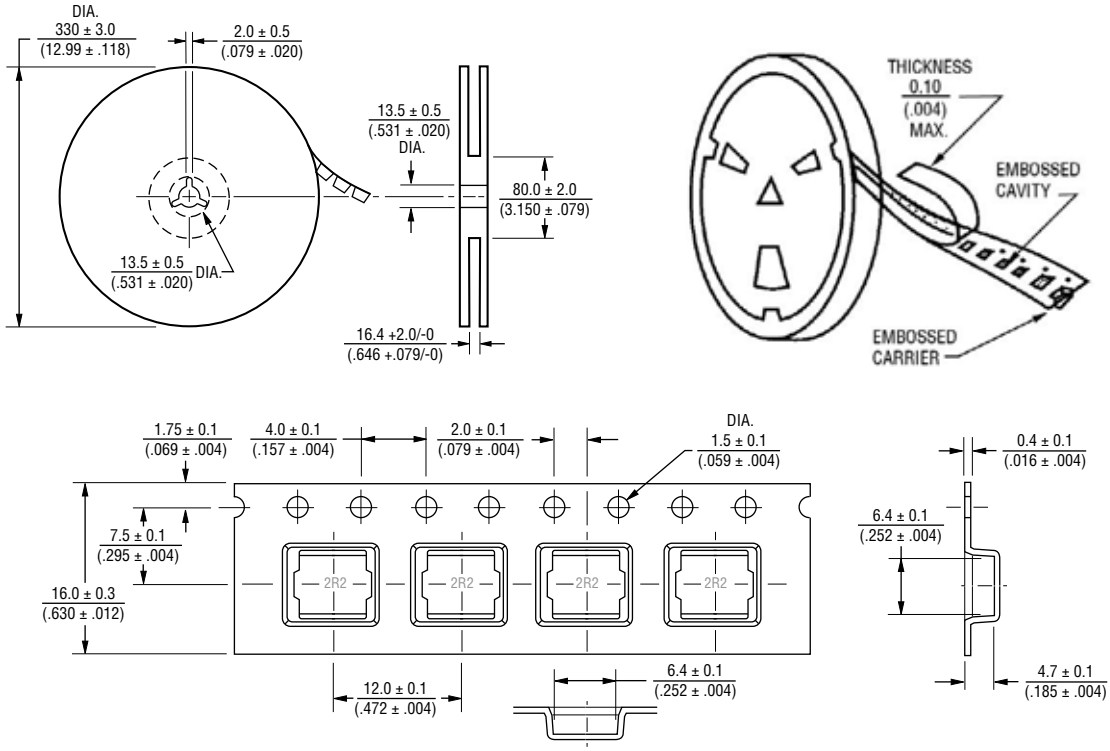


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Soldering Profile



Packaging Specifications



REV. 06/24

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