

Features

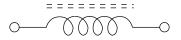
- Semi-shielded construction
- Inductance range: 1 to 470 µH
- Rated current up to 8 A
- AEC-Q200 compliant
- RoHS compliant* and halogen free**

SRN6045TA Series - Semi-shielded Power Inductors

Electrical Specifications @ 25 °C

	Inductance @ 1 MHz / 1 V		Q (Min.)	SRF (MHz)	DCR (mΩ)	Irms (A)	Isat (A)
Bourns Part No.	L (μ H)	Tol. %	@ 1 MHz	Typ.	±20 %	Typ.	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-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
SBN6045TA-471K	470	+ 10	15	3	2050	0.40	0.50

Electrical Schematic



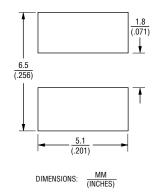
How to Order

SRN6045TA - 100M

Model — Value Code (see table)

WARNING Cancer and Reproductive Harm

Recommended Layout



General Specifications

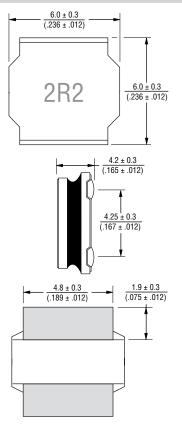
Operating Temp. -55 °C to +125 °C (Temperature rise included)
Storage Temperature .. -55 °C to +125 °C
Temperature Rise 40 °C at rated Irms
Rated Current

............ Inductance drops 30 % at Isat Failure In Time (FIT)24.7/10° hours Mean Time Between Failures (MTBF)

Materials

CoreFerrite
WireEnameled copper
Terminal FinishSn
CoatingMagnetic epoxy resin
Packaging1000 pcs. per 13-inch reel

Product Dimensions



Specifications are subject to change without notice.

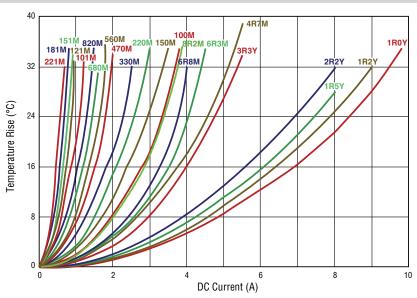
Users should verify actual device performance in their specific applications.

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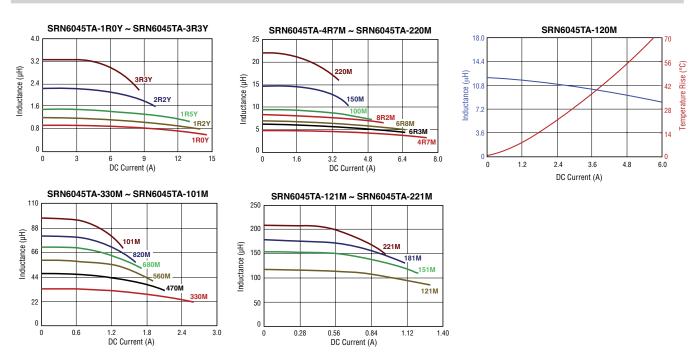
^{*}RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

^{**}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.

Temperature Rise vs. Current

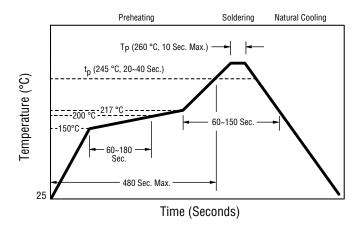


Inductance vs. Current

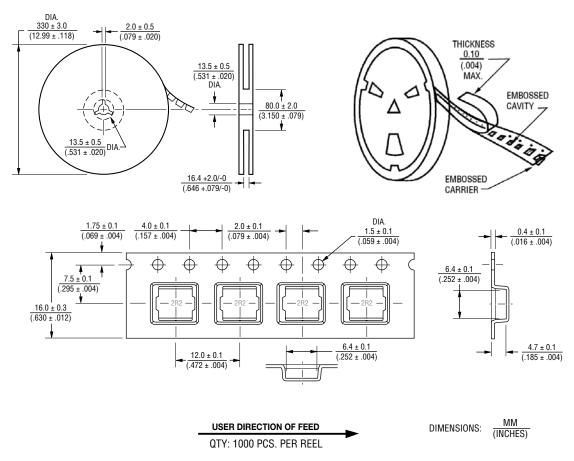


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Soldering Profile



Packaging Specifications



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 SRN6045TA-2R2Y
 SRN6045TA-1R2Y
 SRN6045TA-330M
 SRN6045TA-151M
 SRN6045TA-2R2Y

 221M
 SRN6045TA-181M
 SRN6045TA-4R7M
 SRN6045TA-6R3M
 SRN6045TA-100M
 SRN6045TA-1R0Y

 SRN6045TA-1R5Y
 SRN6045TA-220M
 SRN6045TA-680M
 SRN6045TA-150M
 SRN6045TA-470M
 SRN6045TA-580M

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 SRN6045TA-120M

 SRN6045TA-331K
 SRN6045TA-471K
 SRN6045TA-8R2M