

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Features

- Semi-shielded construction
- Inductance range: 1 to 22 µH
- Rated current up to 2 A
- AEC-Q200 qualified
- RoHS compliant* and halogen free**

Applications

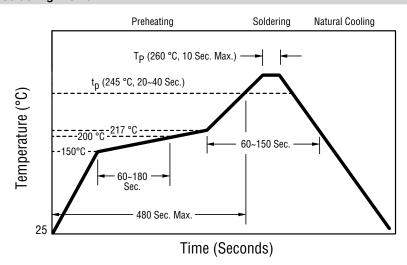
- Automotive systems:
 - Driver assistant
 - Infotainment
 - Lighting
- DC/DC converters
- Power supplies
- Digital video cameras
- HDDs
- Smartphones
- Televisions, LCD displays

SRN3012TA Series - Semi-shielded Power Inductors

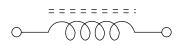
Electrical Specifications @ 25 °C

	Inductance @ 1 MHz / 0.1 V		Q (Min.)	SRF (MHz)	DCR (Ω)	Irms	Isat
Bourns Part No.	L (μH)	Tol. %	@ 1 MHz	Typ.	±20 %	(A)	(A)
SRN3012TA-1R0Y	1.0	±30	10	150	0.042	2.00	2.15
SRN3012TA-1R5Y	1.5	±30	15	130	0.056	1.85	1.7
SRN3012TA-2R2M	2.2	±20	15	90	0.08	1.7	1.5
SRN3012TA-3R3M	3.3	±20	15	70	0.1	1.55	1.2
SRN3012TA-4R7M	4.7	±20	18	55	0.13	1.3	1.05
SRN3012TA-6R8M	6.8	±20	20	45	0.18	1.05	0.9
SRN3012TA-100M	10	±20	20	40	0.245	0.89	0.76
SRN3012TA-150M	15	±20	20	35	0.386	0.74	0.62
SRN3012TA-220M	22	±20	22	25	0.58	0.61	0.49

Soldering Profile



Electrical Schematic



How to Order

General Specifications

Operating Temperature

.....-40 °C to +125 °C (Temperature rise included)
Storage Temperature .. -40 °C to +125 °C
Temperature Rise40 °C at rated Irms
Rated Current

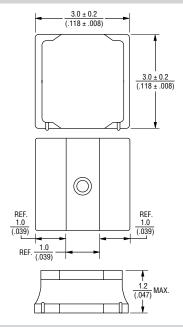
............ Inductance drops 30 % at Isat Failure In Time (FIT)24.7/10° hours Mean Time Between Failures (MTBF)

......40.4 x 10⁶ hours

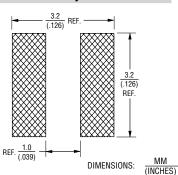
Materials

Core	Ferrite
Wire	Enameled copper
Terminal Finish	Sn
Coating	Magnetic epoxy resin
Packaging	2000 pcs. per 7-inch reel

Product Dimensions



Recommended Layout



The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.

Users should verify actual device performance in their specific applications.

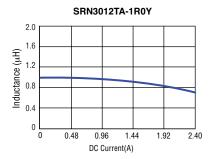
^{*}RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

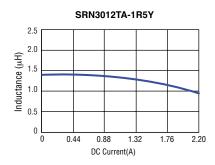
^{**}Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less. Specifications are subject to change without notice.

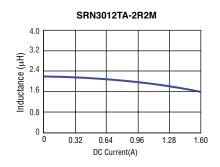
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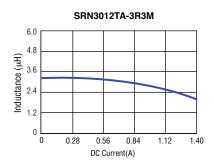
BOURNS

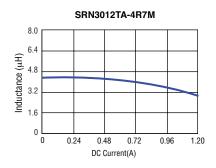
Inductance vs. Current

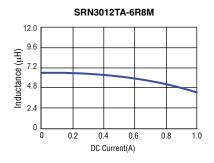


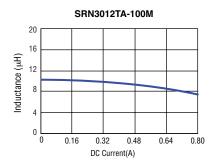


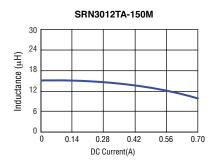


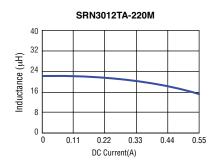












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Packaging Specifications

