


Features

- Semi-shielded construction
- Inductance range: 0.47 to 22 μ H
- Rated current up to 3.2 A
- AEC-Q200 qualified
- RoHS compliant* and halogen free**

 This series is currently available but not recommended for new designs. A possible alternative is the [Model SRN4012BTA](#).

SRN4012TA Series - Semi-shielded Power Inductors

Electrical Specifications @ 25 °C

Bourns Part No.	Inductance @ 100 kHz / 1 V		Q (Min.) @ 100 kHz	SRF (MHz) Typ.	DCR (Ω) ± 20 %	I _{rms} (A)	I _{sat} (A)
	L (μ H)	Tol. %					
SRN4012TA-R47M	0.47	± 20	6	140	0.025	3.2	4
SRN4012TA-1R0M	1.0	± 20	6	100	0.042	2.2	2.8
SRN4012TA-1R2M	1.2	± 20	6	90	0.05	3.7	5.6
SRN4012TA-1R5M	1.5	± 20	6	90	0.05	2	2.2
SRN4012TA-2R2M	2.2	± 20	6	70	0.06	1.9	1.65
SRN4012TA-3R3M	3.3	± 20	6	60	0.07	1.7	1.4
SRN4012TA-4R7M	4.7	± 20	6	45	0.095	1.5	1.2
SRN4012TA-5R6M	5.6	± 20	6	40	0.12	1.4	1.1
SRN4012TA-6R8M	6.8	± 20	6	35	0.125	1.3	0.9
SRN4012TA-100M	10	± 20	10	30	0.18	1.1	0.8
SRN4012TA-150M	15	± 20	10	24	0.26	0.75	0.65
SRN4012TA-220M	22	± 20	10	18	0.4	0.62	0.5

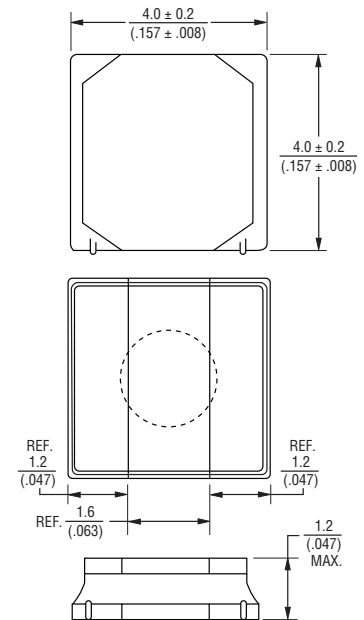
General Specifications

Operating Temperature -40 °C to +125 °C
 (Temperature rise included)
 Storage Temperature .. -40 °C to +125 °C
 Temperature Rise 40 °C at rated I_{rms}
 Rated Current
 Inductance drops 30 % at I_{sat}
 Failure In Time (FIT) 24.7/10⁹ hours
 Mean Time Between Failures (MTBF)
 40.4 x 10⁶ hours

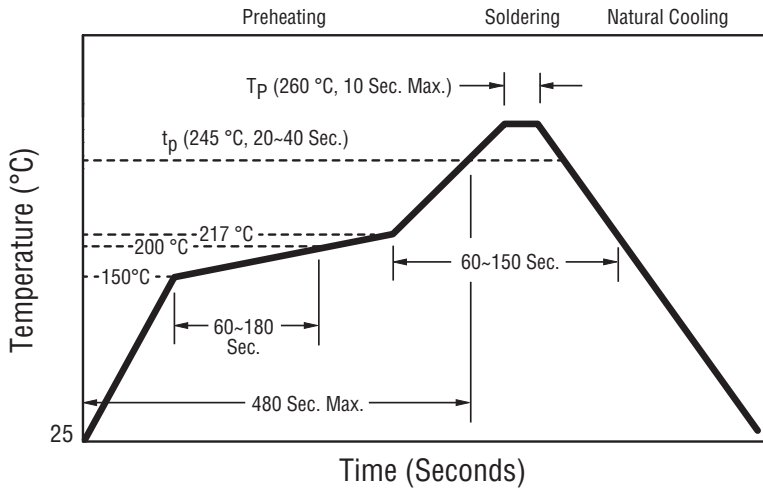
Materials

Core Ferrite
 Wire Enameled copper
 Terminal Finish Sn
 Coating Magnetic epoxy resin
 Packaging 4500 pcs. per 13-inch reel

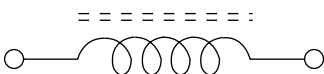
Product Dimensions



Soldering Profile



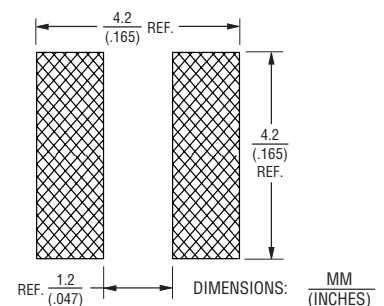
Electrical Schematic



How to Order

Model SRN4012TA - 100M
 Value Code (see table) _____

Recommended Layout



WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

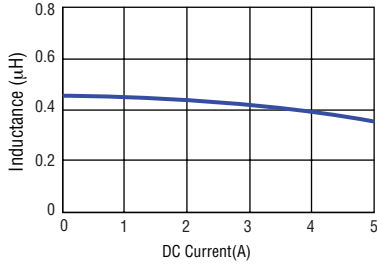
* RoHS Directive 2015/863, Mar 31, 2015 and Annex.
 **Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.
 Specifications are subject to change without notice.
 Users should verify actual device performance in their specific applications.
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SRN4012TA Series - Semi-shielded Power Inductors

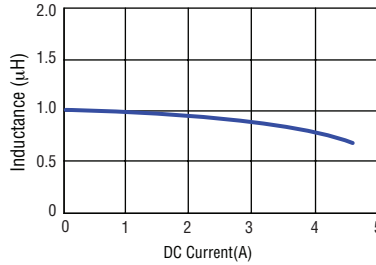
BOURNS®

Inductance vs. Current

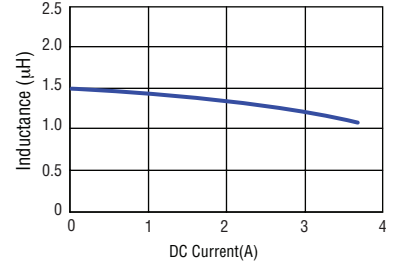
SRN4012TA-R47M



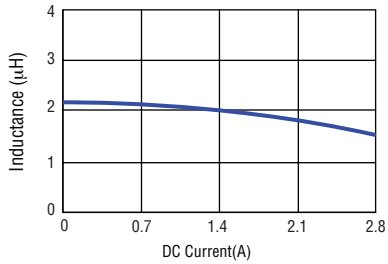
SRN4012TA-1R0M



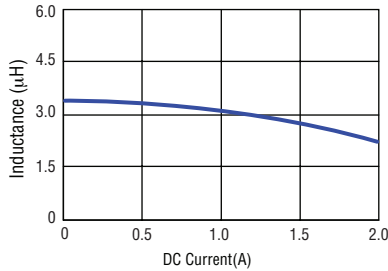
SRN4012TA-1R5M



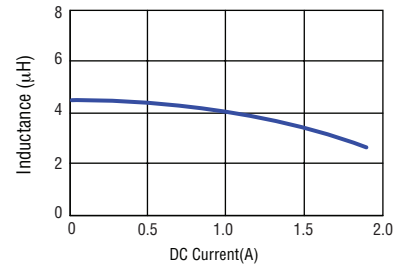
SRN4012TA-2R2M



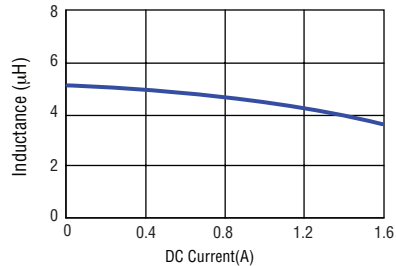
SRN4012TA-3R3M



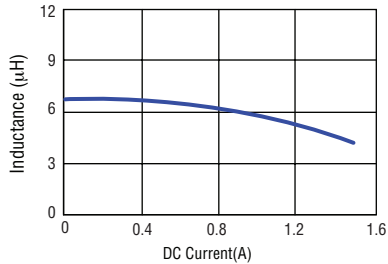
SRN4012TA-4R7M



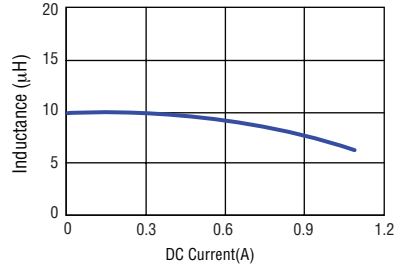
SRN4012TA-5R6M



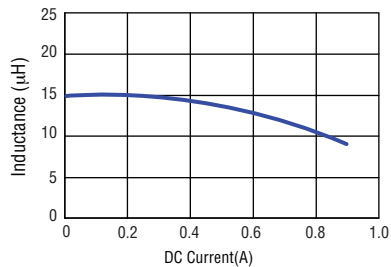
SRN4012TA-6R8M



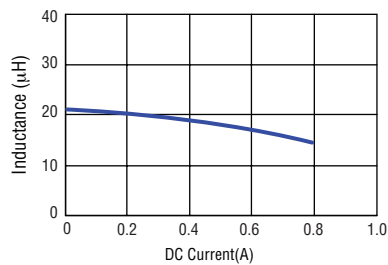
SRN4012TA-100M



SRN4012TA-150M



SRN4012TA-220M



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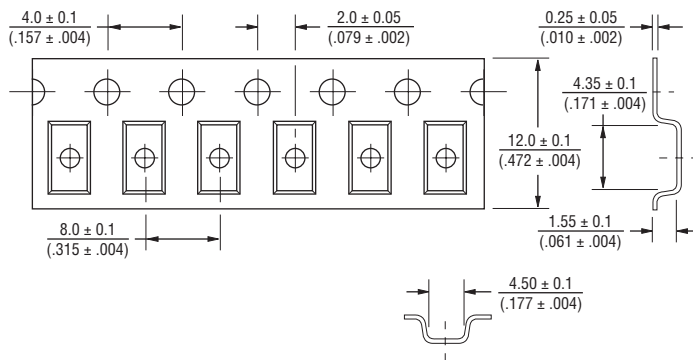
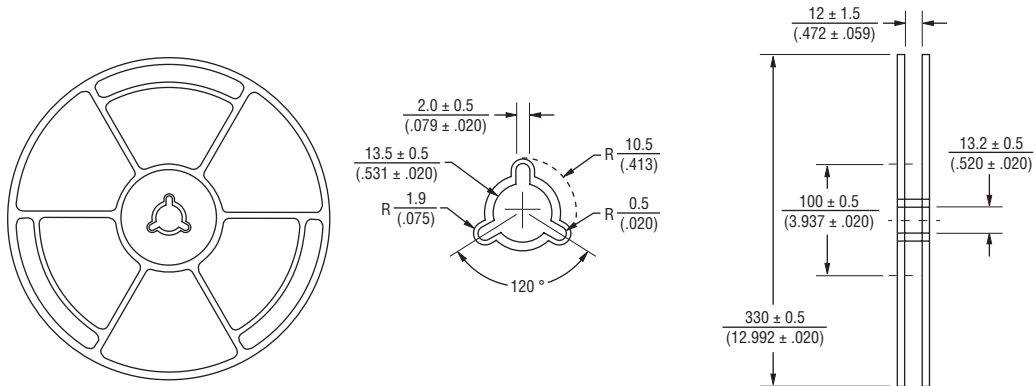
Users should verify actual device performance in their specific applications.

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SRN4012TA Series - Semi-shielded Power Inductors

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Packaging Specifications



DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

USER DIRECTION OF FEED →

QTY: 4500 PCS. PER REEL

REV. 07/22

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