


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

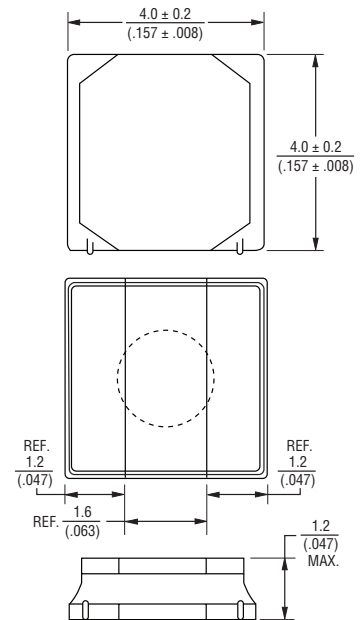
General Specifications

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

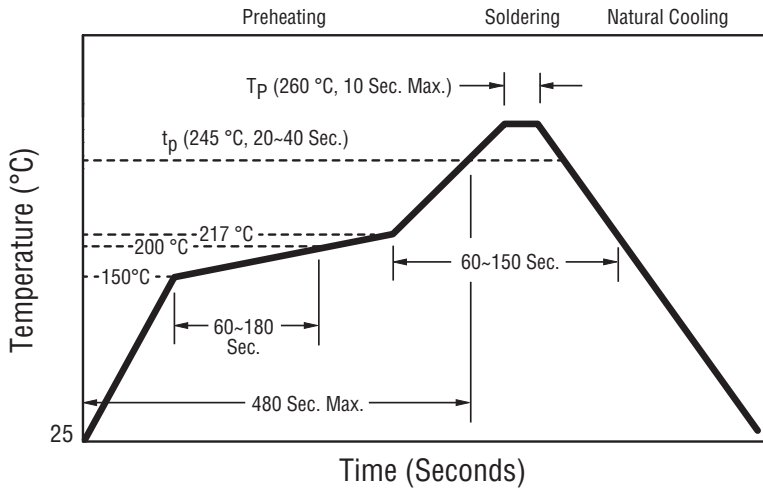
Materials

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

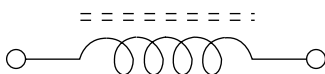
Product Dimensions



Soldering Profile



Electrical Schematic

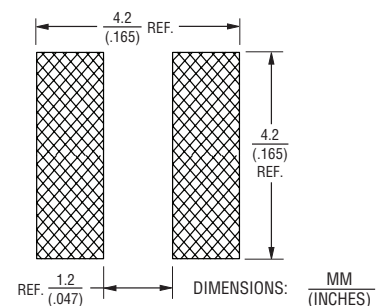


How to Order

SRN4012TA - 100M

Model _____
 Value Code (see table) _____

Recommended Layout



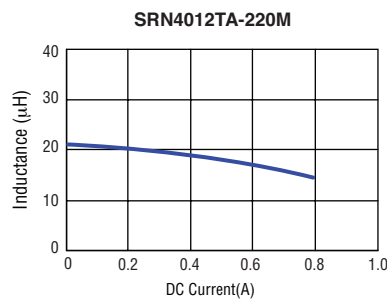
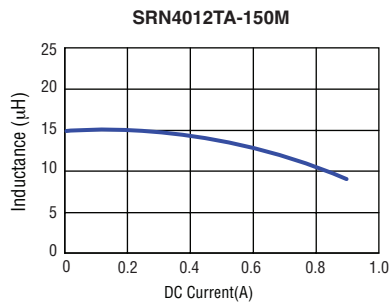
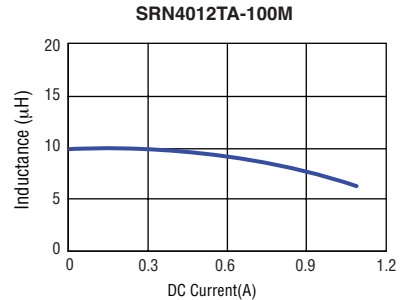
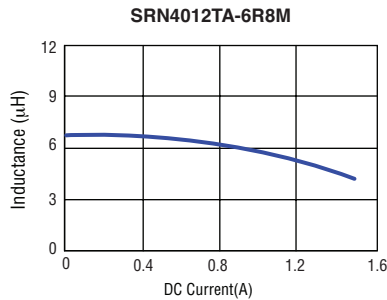
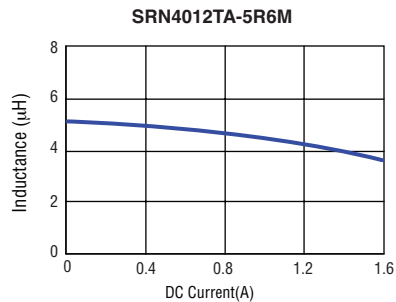
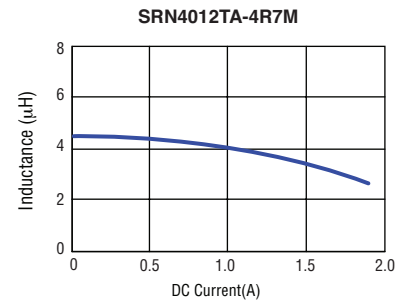
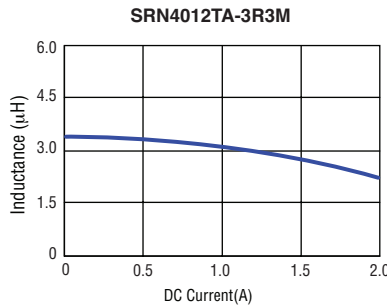
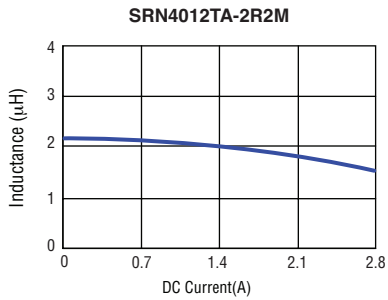
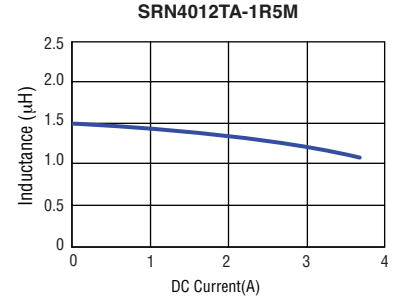
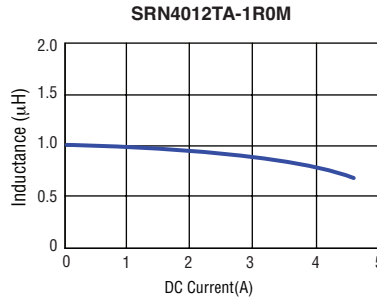
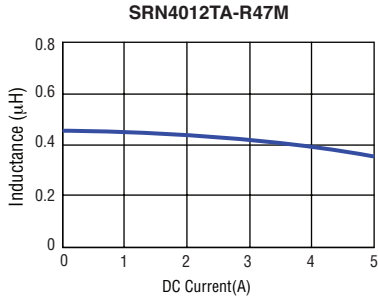
WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

* 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.
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 Users should verify actual device performance in their specific applications.
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SRN4012TA Series - Semi-shielded Power Inductors



Inductance vs. Current



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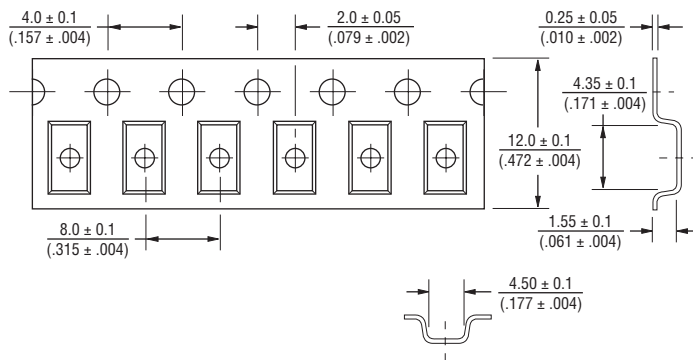
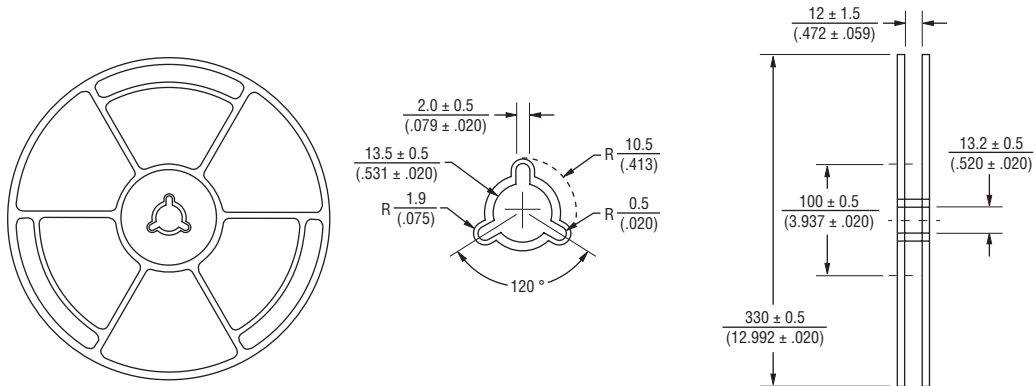
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SRN4012TA Series - Semi-shielded Power Inductors

BOURNS®

Packaging Specifications



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

USER DIRECTION OF FEED →

QTY: 4500 PCS. PER REEL

REV. 07/22

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