



THE DATASHEET OF SRN4018TA-1R5M





Features

- Semi-shielded construction
- Inductance range: 1 to 220 μ H
- Rated current up to 3.7 A
- AEC-Q200 qualified
- RoHS compliant* and halogen free*



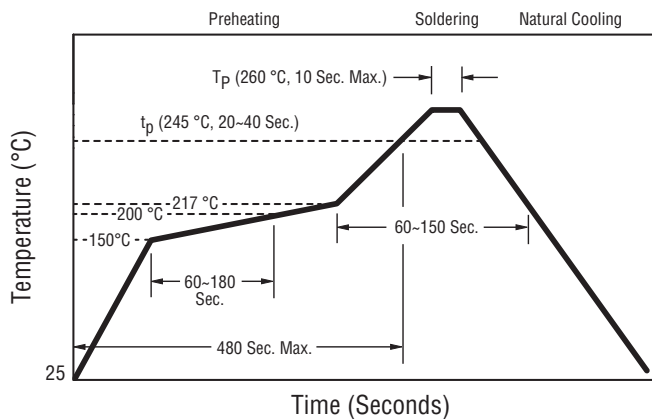
This series is currently available but not recommended for new designs. A possible alternative is the [Model SRN4018BTA](#).

SRN4018TA Series - Semi-shielded Power Inductors

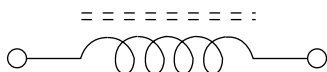
Electrical Specifications @ 25 °C

Bourns Part No.	Inductance @ 100 kHz / 1 V		SRF (MHz) Typ.	DCR (Ω) ± 20 %	Irms (A) Typ.	Isat (A) Typ.
	L (μ H)	Tol. %				
SRN4018TA-1R0M	1.0	± 20	160	0.027	3.7	4
SRN4018TA-1R2M	1.2	± 20	150	0.028	3.5	3.6
SRN4018TA-1R5M	1.5	± 20	110	0.032	3.3	3.3
SRN4018TA-2R2M	2.2	± 20	70	0.042	2.9	3
SRN4018TA-3R3M	3.3	± 20	60	0.055	2.3	2.3
SRN4018TA-4R7M	4.7	± 20	50	0.07	2	2
SRN4018TA-6R8M	6.8	± 20	40	0.098	1.7	1.7
SRN4018TA-100M	10	± 20	35	0.15	1.5	1.5
SRN4018TA-150M	15	± 20	25	0.19	1.1	1.1
SRN4018TA-220M	22	± 20	20	0.29	0.9	0.9
SRN4018TA-330M	33	± 20	12	0.405	0.75	0.75
SRN4018TA-470M	47	± 20	10	0.55	0.6	0.6
SRN4018TA-680M	68	± 20	10	0.89	0.55	0.55
SRN4018TA-101M	100	± 20	8	1.38	0.45	0.45
SRN4018TA-151M	150	± 20	5	1.97	0.35	0.35
SRN4018TA-221M	220	± 20	5	3	0.3	0.3

Soldering Profile



Electrical Schematic



How to Order

SRN4018TA - 100M

Model _____
Value Code (see table) _____



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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General Specifications

Operating Temperature

..... -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) 24.7/10⁹ hours

Mean Time Between Failures (MTBF)

..... 40.4 x 10⁶ hours

Materials

Core Ferrite

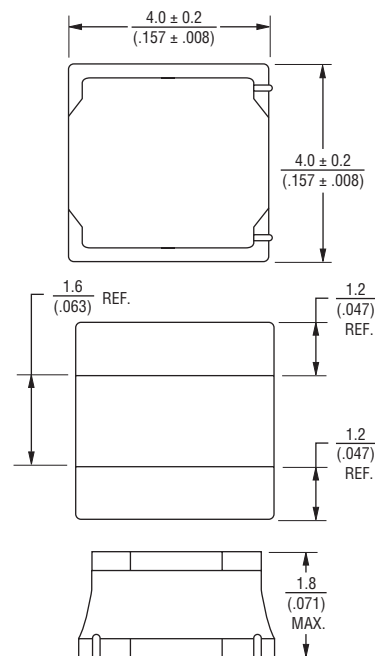
Wire Enameled copper

Terminal Finish Sn

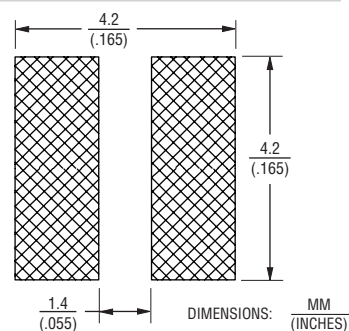
Coating Magnetic epoxy resin

Packaging 3000 pcs. per 13-inch reel

Product Dimensions



Recommended Layout

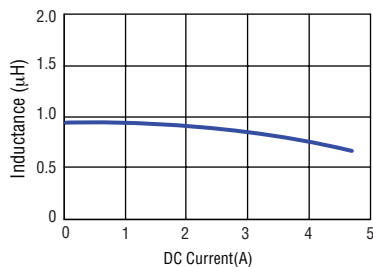


SRN4018TA Series - Semi-shielded Power Inductors

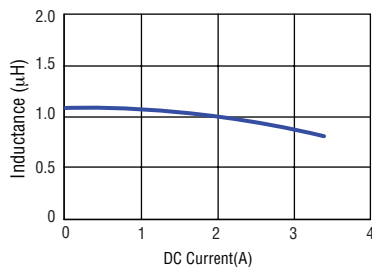
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Inductance vs. Current

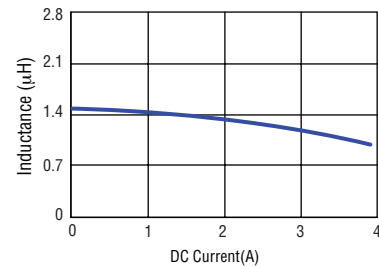
SRN4018TA-1R0M



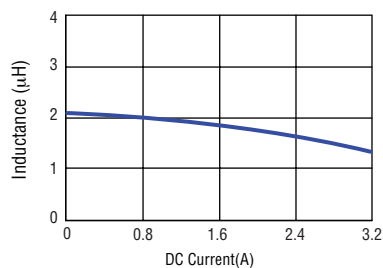
SRN4018TA-1R2M



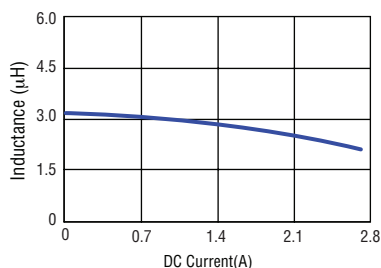
SRN4018TA-1R5M



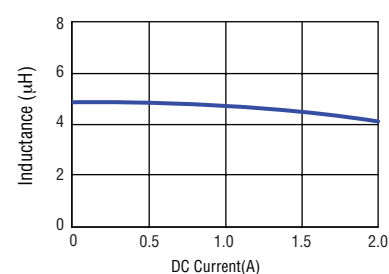
SRN4018TA-2R2M



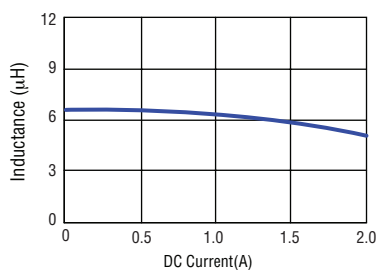
SRN4018TA-3R3M



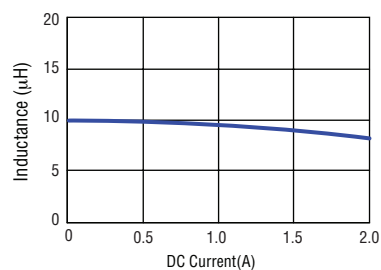
SRN4018TA-4R7M



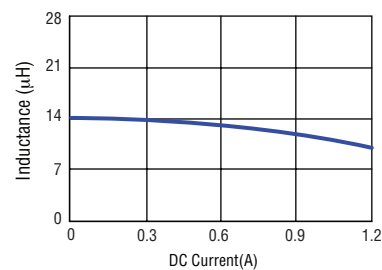
SRN4018TA-6R8M



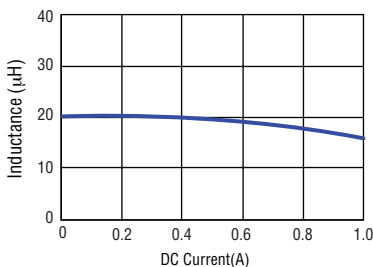
SRN4018TA-100M



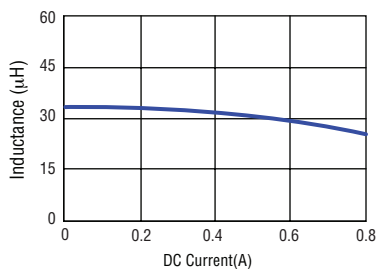
SRN4018TA-150M



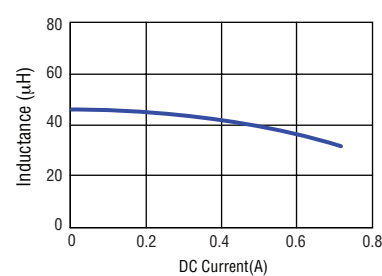
SRN4018TA-220M



SRN4018TA-330M



SRN4018TA-470M



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SRN4018TA-680M

DC Current (A)	Inductance (μH)
0.0	60
0.15	58
0.30	55
0.45	50
0.60	45

SRN4018TA-101M

DC Current (A)	Inductance (μH)
0.0	95
0.1	90
0.2	85
0.3	80
0.4	75
0.5	70

SRN4018TA-151M

DC Current (A)	Inductance (μH)
0.0	140
0.1	135
0.2	130
0.3	120
0.4	110

SRN4018TA-221M

DC Current (A)	Inductance (μH)
0.0	200
0.1	190
0.2	180
0.3	160
0.4	140

Technical drawing of a 6-spoke wheel with dimensions in mm and inches. The drawing includes a top view, a side view, and a bottom view. Dimensions are provided for spoke width, spoke height, spoke thickness, spoke angle, and overall diameter. A note indicates the user direction of feed.

Top View Dimensions:

- Spoke Width: 2.0 ± 0.5 (.079 $\pm$.020)
- Spoke Height: 13.5 ± 0.5 (.531 $\pm$.020)
- Spoke Thickness: 1.9 (.075)
- Spoke Angle: 120°
- Overall Diameter: 10.5 (.413)

Side View Dimensions:

- Spoke Thickness: 12 ± 1.5 (.472 $\pm$.059)
- Spoke Height: 100 ± 0.5 (3.937 $\pm$.020)
- Spoke Angle: 5°
- Spoke Thickness: 13.2 ± 0.5 (.520 $\pm$.020)

Bottom View Dimensions:

- Spoke Width: 1.75 ± 0.10 (.069 $\pm$.004)
- Spoke Height: 12.0 ± 0.10 (.472 $\pm$.004)
- Spoke Thickness: 5.50 ± 0.05 (.217 $\pm$.002)
- Spoke Angle: 8°
- Spoke Thickness: 8.0 ± 0.10 (.315 $\pm$.004)
- Spoke Height: 4.50 ± 0.10 (.177 $\pm$.004)
- Spoke Thickness: 1.50 ± 0.10 (.059 $\pm$.004)
- Spoke Angle: 5°
- Spoke Thickness: $1.50 \pm 0.10 / 0.00$ (.059 $\pm$.004 / .000) DIA.
- Spoke Height: 4.35 ± 0.10 (.171 $\pm$.004)
- Spoke Thickness: 1.90 ± 0.10 (.075 $\pm$.004)

Other Dimensions:

- Spoke Thickness: 0.25 ± 0.05 (.010 $\pm$.002)
- Spoke Height: 330 ± 0.5 (12.992 $\pm$.020)

USER DIRECTION OF FEED

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