



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**

Applications

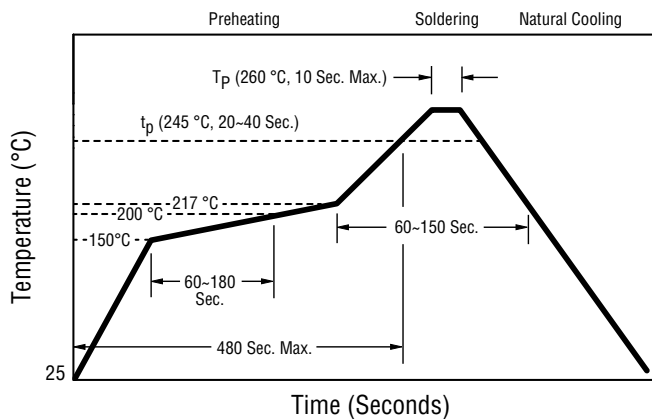
- Automotive systems:
 - Driver assistant
 - Infotainment
 - Lighting
- DC/DC converters
- Power supplies
- Digital video cameras
- HDDs
- Smartphones
- Televisions, LCD displays

SRN4018TA Series - Semi-shielded Power Inductors

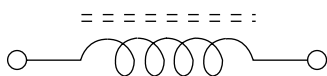
Electrical Specifications @ 25 °C

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

Model SRN4018TA - 100M
Value Code (see table) _____

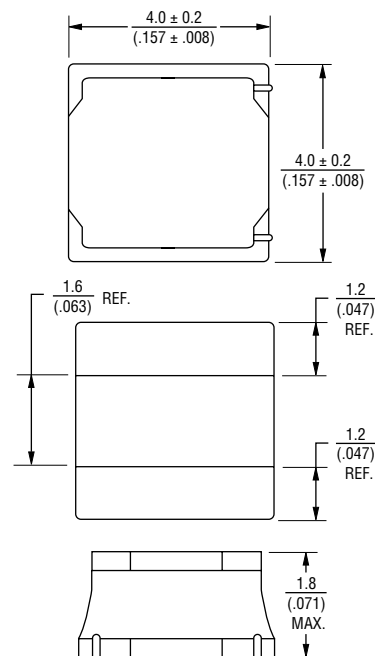
General Specifications

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

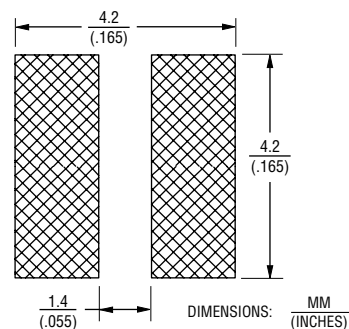
Materials

Core Ferrite
Wire Enameled copper
Terminal Finish Sn
Coating Magnetic epoxy resin
Packaging 3000 pcs. per 13-inch reel

Product Dimensions



Recommended Layout



*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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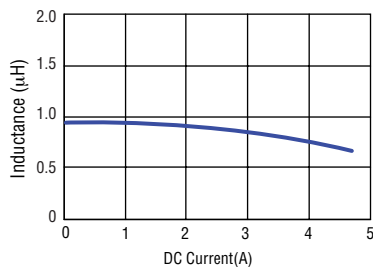
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SRN4018TA Series - Semi-shielded Power Inductors

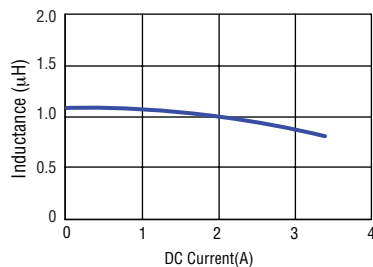
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Inductance vs. Current

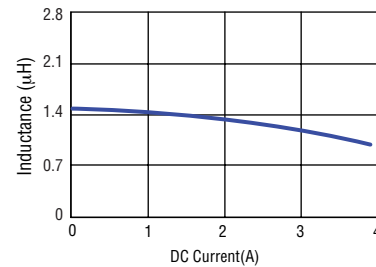
SRN4018TA-1R0M



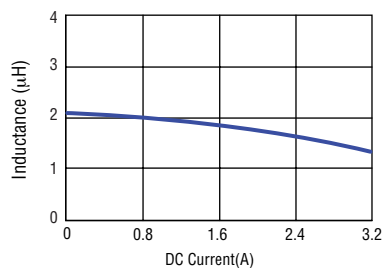
SRN4018TA-1R2M



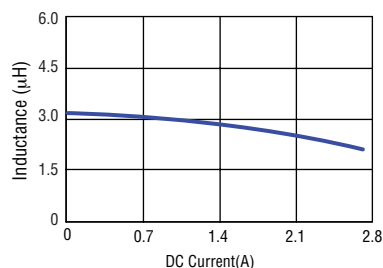
SRN4018TA-1R5M



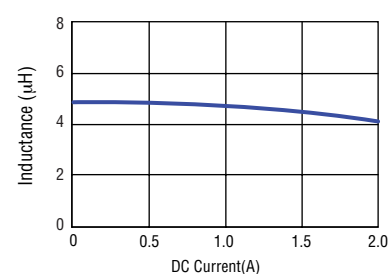
SRN4018TA-2R2M



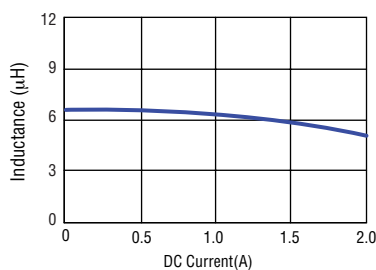
SRN4018TA-3R3M



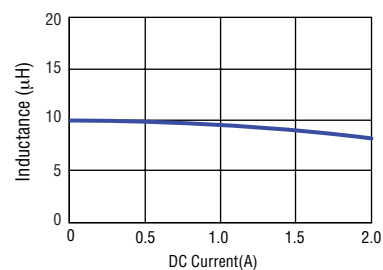
SRN4018TA-4R7M



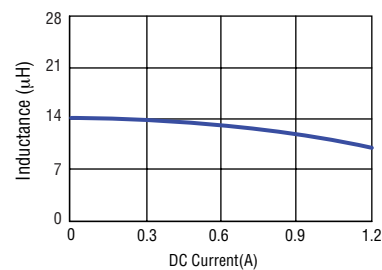
SRN4018TA-6R8M



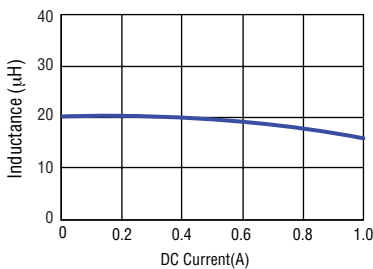
SRN4018TA-100M



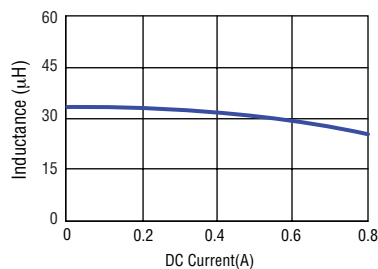
SRN4018TA-150M



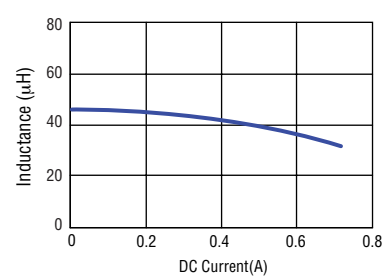
SRN4018TA-220M



SRN4018TA-330M



SRN4018TA-470M



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The figure displays four graphs showing the Inductance (μH) versus DC Current (A) for different SRN4018TA components. Each graph shows a blue curve representing the inductance profile, which decreases as DC current increases.

- SRN4018TA-680M:** The y-axis ranges from 0 to 120 μH , and the x-axis ranges from 0 to 0.60 A. The inductance starts at approximately 65 μH at 0 A and decreases to about 45 μH at 0.60 A.
- SRN4018TA-101M:** The y-axis ranges from 0 to 200 μH , and the x-axis ranges from 0 to 0.5 A. The inductance starts at approximately 95 μH at 0 A and decreases to about 65 μH at 0.5 A.
- SRN4018TA-151M:** The y-axis ranges from 0 to 280 μH , and the x-axis ranges from 0 to 0.4 A. The inductance starts at approximately 140 μH at 0 A and decreases to about 100 μH at 0.4 A.
- SRN4018TA-221M:** The y-axis ranges from 0 to 400 μH , and the x-axis ranges from 0 to 0.4 A. The inductance starts at approximately 190 μH at 0 A and decreases to about 140 μH at 0.4 A.

Technical drawing of a 6-hole circular plate. The drawing includes a top view, a side view, and a bottom view. The top view shows a circular plate with six holes arranged in two rows of three. The side view shows the profile of the plate with a central slot. The bottom view shows the underside of the plate with four mounting holes. Dimensions are provided in millimeters (MM) and inches (INCHES).

Top View Dimensions:

- Overall Diameter: 12.0 ± 0.10 (MM) / $(.472 \pm .004)$ (INCHES)
- Distance between hole centers (horizontal): 8.0 ± 0.10 (MM) / $(.315 \pm .004)$ (INCHES)
- Distance between hole centers (vertical): 5.50 ± 0.05 (MM) / $(.217 \pm .002)$ (INCHES)
- Distance from edge to hole center (horizontal): 1.75 ± 0.10 (MM) / $(.069 \pm .004)$ (INCHES)
- Distance from edge to hole center (vertical): 4.00 ± 0.10 (MM) / $(.157 \pm .004)$ (INCHES)
- Distance from edge to hole center (diagonal): 2.00 ± 0.05 (MM) / $(.079 \pm .002)$ (INCHES)
- Hole Diameter: $1.50 \pm 0.10 / -0.00$ (MM) / $(.059 \pm .004 / -.000)$ (INCHES)

Side View Dimensions:

- Overall Thickness: 12.0 ± 0.10 (MM) / $(.472 \pm .004)$ (INCHES)
- Distance from top edge to hole center: $1.50 \pm 0.10 / -0.00$ (MM) / $(.059 \pm .004 / -.000)$ (INCHES)
- Distance from bottom edge to hole center: $1.50 \pm 0.10 / -0.00$ (MM) / $(.059 \pm .004 / -.000)$ (INCHES)
- Distance from edge to hole center (diagonal): 2.00 ± 0.05 (MM) / $(.079 \pm .002)$ (INCHES)
- Hole Diameter: $1.50 \pm 0.10 / -0.00$ (MM) / $(.059 \pm .004 / -.000)$ (INCHES)

Bottom View Dimensions:

- Overall Width: 12.0 ± 0.10 (MM) / $(.472 \pm .004)$ (INCHES)
- Distance between hole centers (horizontal): 8.0 ± 0.10 (MM) / $(.315 \pm .004)$ (INCHES)
- Distance between hole centers (vertical): 5.50 ± 0.05 (MM) / $(.217 \pm .002)$ (INCHES)
- Distance from edge to hole center (horizontal): 1.75 ± 0.10 (MM) / $(.069 \pm .004)$ (INCHES)
- Distance from edge to hole center (vertical): 4.00 ± 0.10 (MM) / $(.157 \pm .004)$ (INCHES)
- Distance from edge to hole center (diagonal): 2.00 ± 0.05 (MM) / $(.079 \pm .002)$ (INCHES)
- Hole Diameter: $1.50 \pm 0.10 / -0.00$ (MM) / $(.059 \pm .004 / -.000)$ (INCHES)

Other Dimensions:

- Distance from edge to hole center (diagonal): 2.00 ± 0.05 (MM) / $(.079 \pm .002)$ (INCHES)
- Hole Diameter: $1.50 \pm 0.10 / -0.00$ (MM) / $(.059 \pm .004 / -.000)$ (INCHES)
- Distance from edge to hole center (diagonal): 2.00 ± 0.05 (MM) / $(.079 \pm .002)$ (INCHES)
- Hole Diameter: $1.50 \pm 0.10 / -0.00$ (MM) / $(.059 \pm .004 / -.000)$ (INCHES)

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