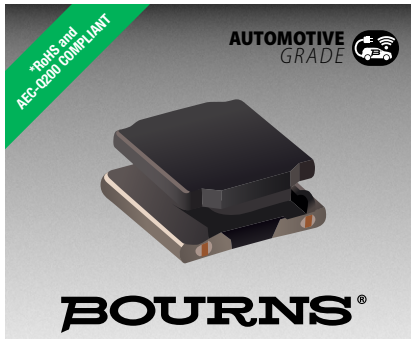




## Features

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



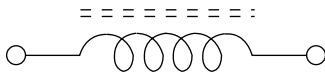
This series is currently available but not recommended for new designs. A possible alternative is the [Model SRN4018BTA](#).

## SRN4018TA Series – Semi-shielded Power Inductors

### Electrical Specifications @ 25 °C

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

### Electrical Schematic

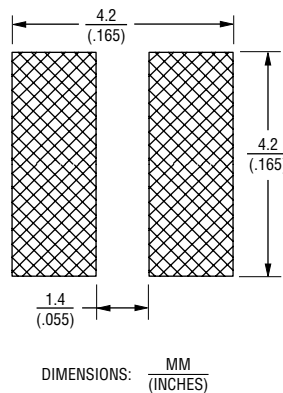


### How to Order

**SRN4018TA - 100M**

Model \_\_\_\_\_  
Value Code (see table) \_\_\_\_\_

### Recommended Layout



### Additional Information

Click these links for more information:



[PRODUCT  
SELECTOR](#)



[TECHNICAL  
LIBRARY](#)



[INVENTORY](#)



[SAMPLES](#)



[CONTACT](#)

### 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) .....24.7/10<sup>9</sup> hours

Mean Time Between Failures (MTBF)

.....40.4 x 10<sup>6</sup> hours

### Materials

Core ..... Ferrite

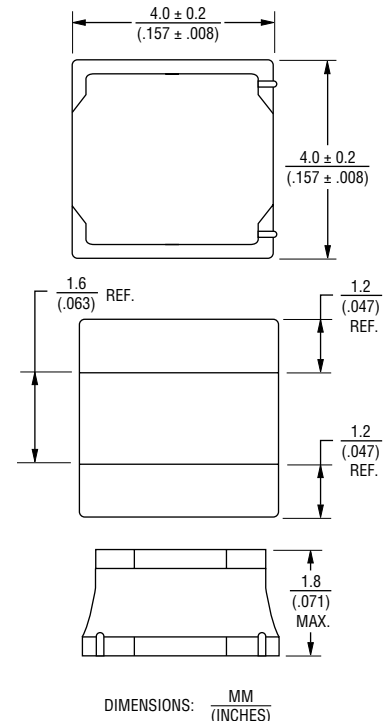
Wire ..... Enameled copper

Terminal Finish ..... Sn

Coating ..... Magnetic epoxy resin

Packaging ..... 3000 pcs. per 13-inch reel

### Product Dimensions



**WARNING**  
**Cancer and Reproductive Harm**  
[www.P65Warnings.ca.gov](http://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.

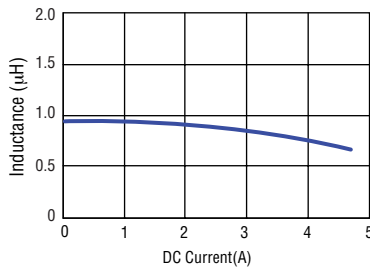
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# SRN4018TA Series – Semi-shielded Power Inductors

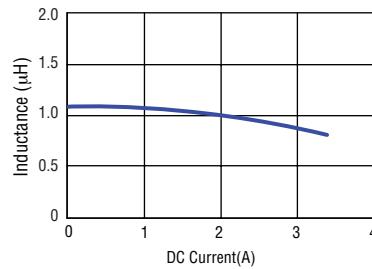
**BOURNS®**

## Inductance vs. Current

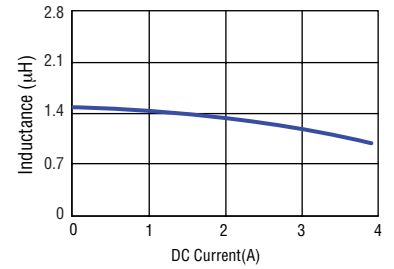
**SRN4018TA-1R0M**



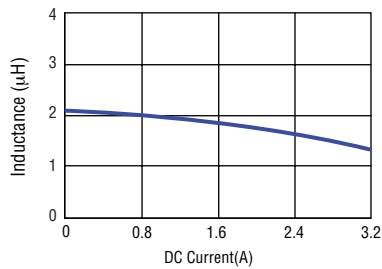
**SRN4018TA-1R2M**



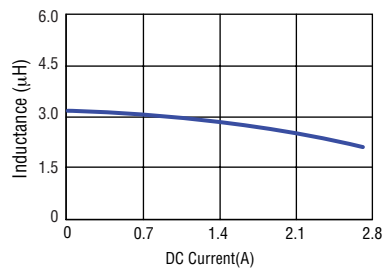
**SRN4018TA-1R5M**



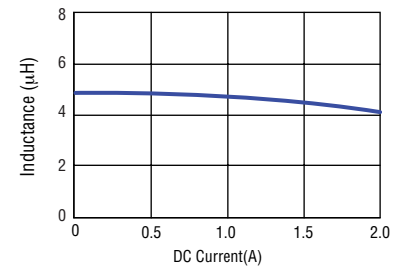
**SRN4018TA-2R2M**



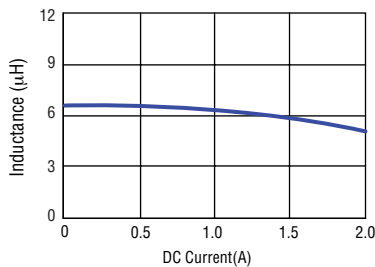
**SRN4018TA-3R3M**



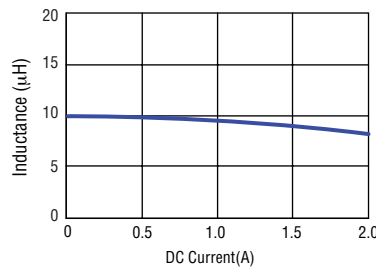
**SRN4018TA-4R7M**



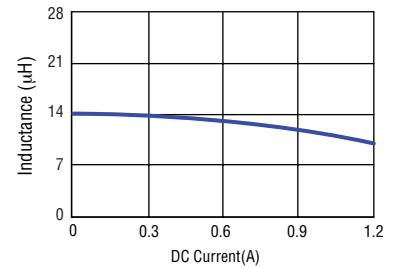
**SRN4018TA-6R8M**



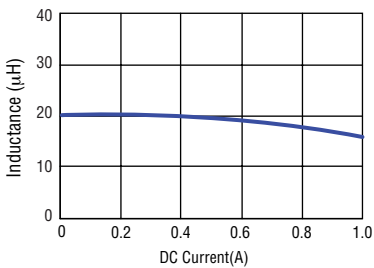
**SRN4018TA-100M**



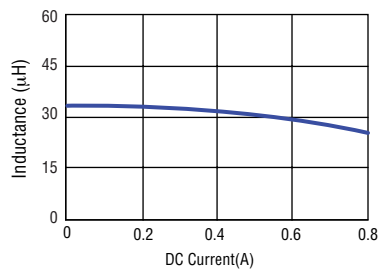
**SRN4018TA-150M**



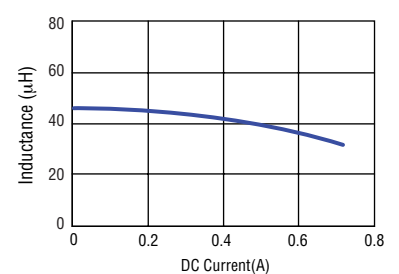
**SRN4018TA-220M**



**SRN4018TA-330M**



**SRN4018TA-470M**



Specifications are subject to change without notice.

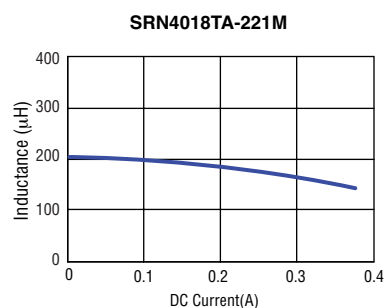
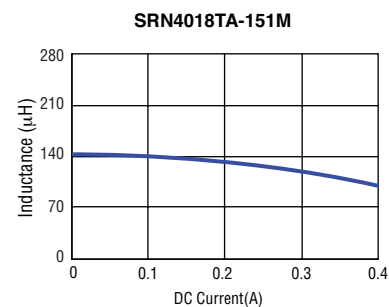
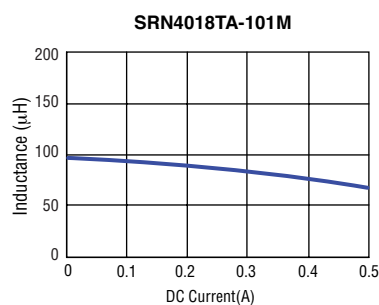
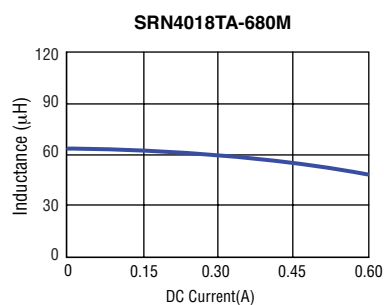
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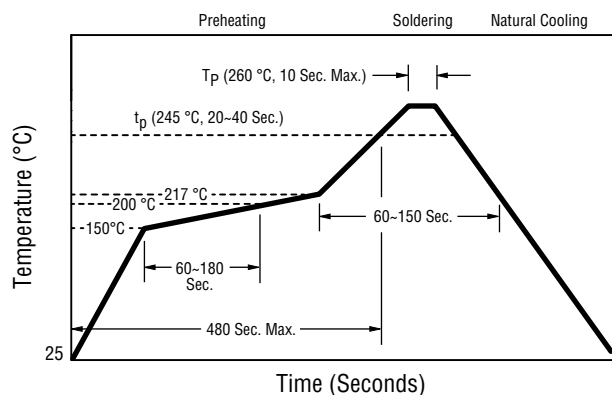
## SRN4018TA Series – Semi-shielded Power Inductors

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### Inductance vs. Current (continued)



### Soldering Profile



Specifications are subject to change without notice.

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