

Features

- Semi-shielded construction
- Miniature size
- Low profile 1.8 mm max.
- Inductance range: 0.82 to 220 µH
- High rated current up to 4.0 A
- RoHS compliant* and halogen free**

Applications

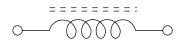
- DC/DC converters
- Notebook computers
- Digital video cameras
- HDDs
- Cell phones
- Televisions, LCD displays

SRN4018 Series - Semi-shielded Power Inductors

Electrical Specifications @ 25 °C

| | Inductance @ 100 KHz/1 V | | Q | Test Freg. | SRF (MHz) | DCR (Ω) | Irms | Isat |
|-----------------|-----------------------------|--------|--------|---------------|--------------|------------|------|------|
| Bourns Part No. | L (μH) | Tol. % | (Ref.) | (MHz) | `Typ.´ | Max. | (A) | (A) |
| SRN4018-R82Y | 0.82 | 30 | 9 | 7.96 | 100 | 0.019 | 4.0 | 4.7 |
| SRN4018-1R0Y | 1.0 | 30 | 9 | 7.96 | 90 | 0.023 | 3.7 | 4.2 |
| SRN4018-1R2Y | 1.2 | 30 | 9 | 7.96 | 80 | 0.025 | 3.5 | 4.0 |
| SRN4018-1R5Y | 1.5 | 30 | 9 | 7.96 | 70 | 0.032 | 3.1 | 3.5 |
| SRN4018-2R2M | 2.2 | 20 | 9 | 7.96 | 60 | 0.044 | 2.9 | 3.0 |
| SRN4018-2R7M | 2.7 | 20 | 9 | 7.96 | 52 | 0.052 | 2.3 | 2.4 |
| SRN4018-3R3M | 3.3 | 20 | 9 | 7.96 | 45 | 0.066 | 2.2 | 2.3 |
| SRN4018-4R7M | 4.7 | 20 | 9 | 7.96 | 35 | 0.084 | 1.9 | 2.0 |
| SRN4018-6R8M | 6.8 | 20 | 9 | 7.96 | 30 | 0.118 | 1.5 | 1.6 |
| SRN4018-100M | 10 | 20 | 11 | 2.52 | 25 | 0.180 | 1.3 | 1.4 |
| SRN4018-150M | 15 | 20 | 11 | 2.52 | 18 | 0.264 | 1.0 | 1.1 |
| SRN4018-220M | 22 | 20 | 11 | 2.52 | 15 | 0.348 | 0.9 | 0.95 |
| SRN4018-330M | 33 | 20 | 11 | 2.52 | 12 | 0.552 | 0.7 | 0.75 |
| SRN4018-470M | 47 | 20 | 11 | 2.52 | 10 | 0.780 | 0.6 | 0.62 |
| SRN4018-680M | 68 | 20 | 11 | 2.52 | 8 | 1.128 | 0.5 | 0.50 |
| SRN4018-101M | 100 | 20 | 23 | 0.796 | 6 | 1.596 | 0.42 | 0.45 |
| SRN4018-151M | 150 | 20 | 23 | 0.796 | 5 | 2.400 | 0.32 | 0.35 |
| SRN4018-221M | 220 | 20 | 30 | 0.796 | 3 | 3.552 | 0.28 | 0.30 |
| SRN4018-331M | 330 | 20 | 30 | 0.796 | 6 | 6.36 | 0.2 | 0.21 |

Electrical Schematic



Recommended Layout (.142) $\frac{1.5}{(.059)}$ MM DIMENSIONS: (INCHES)

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

- 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 (CI) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (CI) 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

.....-40 °C to +125 °C (Temperature rise included)

Storage Temperature (Component)-40 °C to +125 °C

Resistance to Solder Heat

.....+260 °C for 10 sec. Temperature Rise40 °C at rated Irms Rated Current

..... Inductance drops 30 % at Isat Moisture Sensitivity Level1 ESD Classification (HBM).....N/A

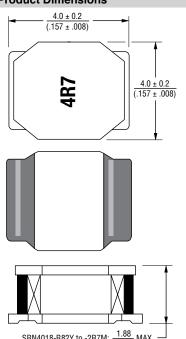
Materials

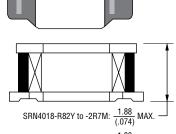
| Core | Ferrite |
|-----------------|-----------------------|
| Wire | Enameled copper |
| Terminal Finish | Sn/Ag/Cu |
| Coating | Magnetic epoxy resin |
| Packaging 3000 | pcs. per 13-inch reel |
| | |

How to Order

SRN4018 - 100M Model -Value Code (see table)

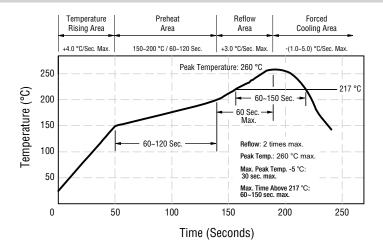
Product Dimensions



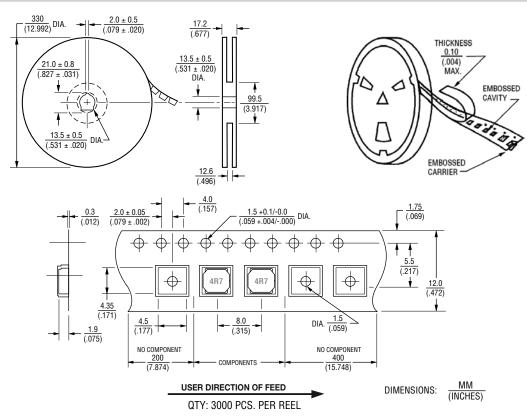


SRN4018-3R3M to -331M: 1.80 MAX.

Soldering Profile



Packaging Specifications



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Authorized Distributor

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Bourns:

 SRN4018-101M
 SRN4018-221M
 SRN4018-330M
 SRN4018-1R2Y
 SRN4018-R82Y
 SRN4018-680M
 SRN4018

 220M
 SRN4018-4R7M
 SRN4018-470M
 SRN4018-6R8M
 SRN4018-1R5Y
 SRN4018-3R3M
 SRN4018-1R0Y

 SRN4018-150M
 SRN4018-2R2M
 SRN4018-151M
 SRN4018-2R7M
 SRN4018-100M
 SRN4018A-100M
 SRN4018A-100M
 SRN4018A-100M
 SRN4018A-6R8M

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