



**THE DATASHEET OF
SRN4018-1R0Y**





Features

- Semi-shielded construction
- Miniature size
- Low profile - 1.8 mm max.
- Inductance range: 0.82 to 220 μ H
- 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

| Bourns Part No. | Inductance @ 100 KHz/1 V | | Q (Ref.) | Test Freq. (MHz) | SRF (MHz) Typ. | DCR (Ω) Max. | I _{rms} (A) | I _{sat} (A) |
|-----------------|--------------------------|--------|----------|------------------|----------------|-----------------------|----------------------|----------------------|
| | L (μ H) | Tol. % | | | | | | |
| 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 |

Additional Information

Click these links for more information:



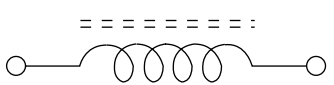
General Specifications

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 Rise 40 °C at rated I_{rms}
 Rated Current Inductance drops 30 % at I_{sat}
 Moisture Sensitivity Level 1
 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

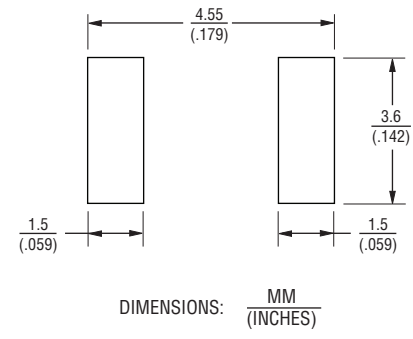
Electrical Schematic



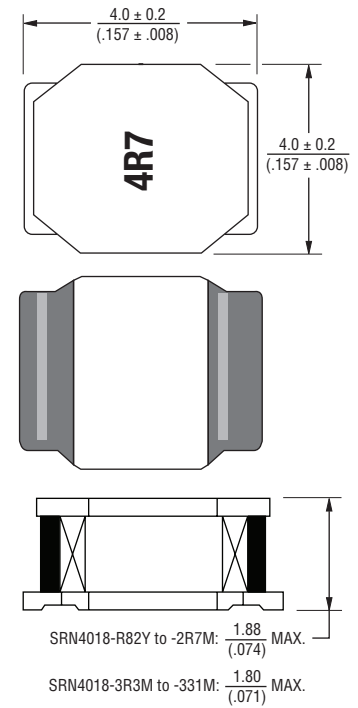
How to Order

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

Recommended Layout



Product Dimensions



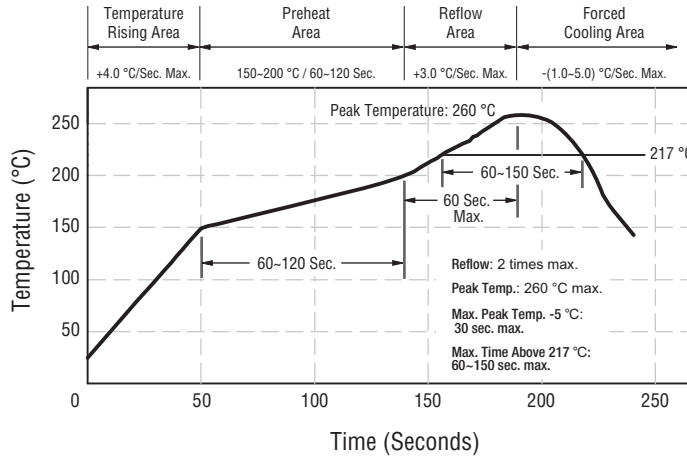
WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

* 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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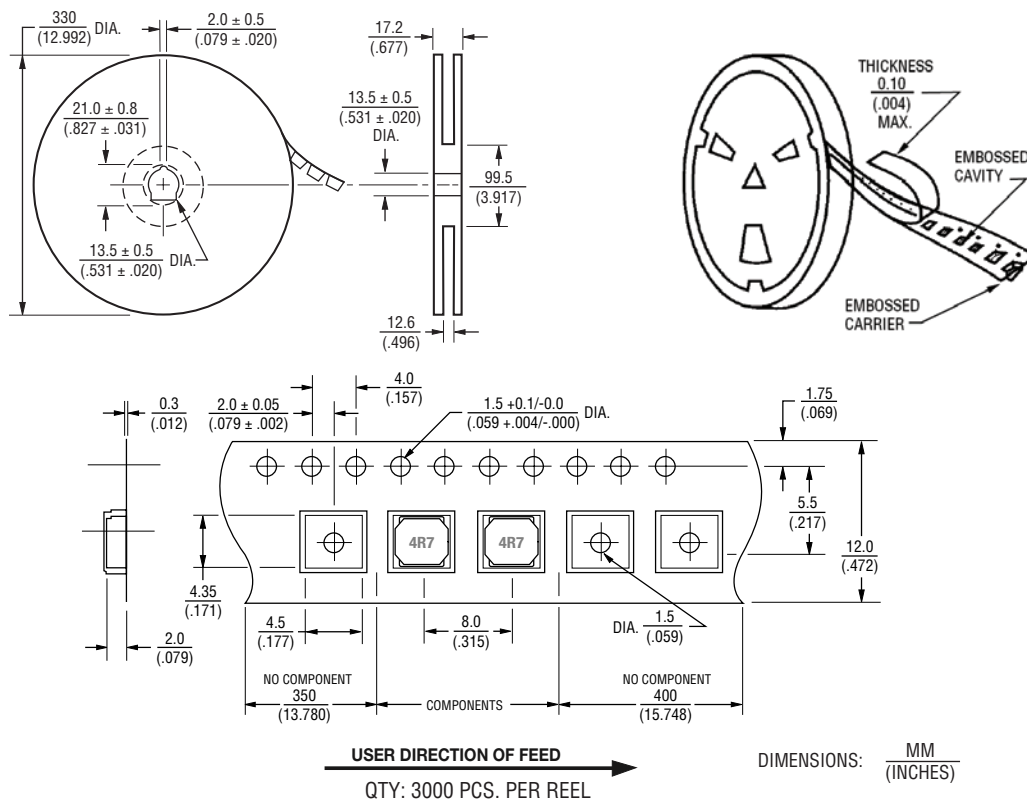
SRN4018 Series - Semi-shielded Power Inductors

BOURNS®

Soldering Profile



Packaging Specifications



REV. 01/22

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Users should verify actual device performance in their specific applications.

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