

#### **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**

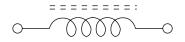
- DC/DC converters
- Notebook computers
- Digital video cameras
- HDDs
- Cell phones
- Televisions, LCD displays

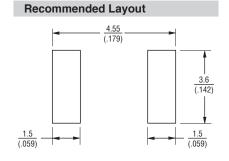
# SRN4018 Series - Semi-shielded Power Inductors

#### Electrical Specifications @ 25 °C

|                 | Inductance<br>@ 100 KHz/1 V |        | Q      | Test<br>Freq. | SRF<br>(MHz) | DCR<br>(Ω) | Irms | Isat |
|-----------------|-----------------------------|--------|--------|---------------|--------------|------------|------|------|
| Bourns Part No. | <b>L (μH)</b>               | 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





#### **General Specifications**

Operating Temperature

Resistance to Solder Heat

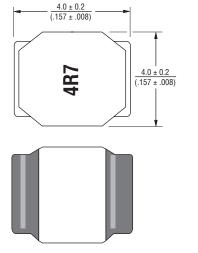
.....+260 °C for 10 sec. Temperature Rise .....40 °C at rated Irms Rated Current

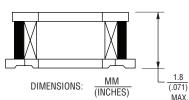
#### **Materials**

| Wire<br>Terminal Finish<br>Coating | FerriteFerriteEnameled copperSn/Ag/CuMagnetic epoxy resin |
|------------------------------------|---|
| Packaging 300                      | 0 pcs. per 13-inch reel                                   |
|                                    |   |

#### **How to Order**

#### **Product Dimensions**





Specifications are subject to change without notice.

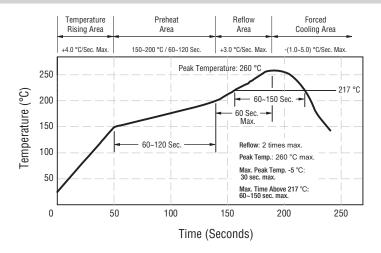
Users should verify actual device performance in their specific applications.

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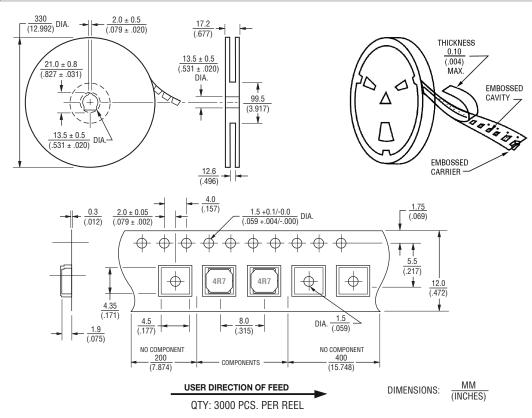
<sup>\*</sup> RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

<sup>\*\*</sup> 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.

#### **Soldering Profile**



#### **Packaging Specifications**



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