



**THE DATASHEET OF  
SRR4018-1R8Y**





## Features

- Height of 2.0 mm
- Current rating up to 2.7 A
- RoHS compliant\*

## Applications

- Input/output of DC/DC converters
- Power supplies for:
  - Portable communication equipment
  - Camcorders
  - LCD TVs

# SRR4018 Series - Shielded SMD Power Inductors

### Electrical Characteristics

| Bourns Part Number | Inductance 100 kHz |        | Q Ref. | Test Frequency (MHz) | SRF Typ. (MHz) | DCR Max. (mΩ) | I rms (A) | I sat (A) |
|--------------------|--------------------|--------|--------|----------------------|----------------|---------------|-----------|-----------|
|                    | (μH)               | Tol. % |        |                      |                |               |           |           |
| SRR4018-1R0Y       | 1.0                | ±30    | 9      | 7.960                | 219            | 35            | 2.70      | 2.60      |
| SRR4018-1R8Y       | 1.8                | ±30    | 9      | 7.960                | 105            | 58            | 2.35      | 2.20      |
| SRR4018-2R2Y       | 2.2                | ±30    | 8      | 7.960                | 90             | 55            | 2.10      | 2.10      |
| SRR4018-2R7Y       | 2.7                | ±30    | 8      | 7.960                | 78             | 60            | 2.03      | 1.95      |
| SRR4018-3R3Y       | 3.3                | ±30    | 8      | 7.960                | 61             | 65            | 1.95      | 1.80      |
| SRR4018-3R9Y       | 3.9                | ±30    | 8      | 7.960                | 60             | 75            | 1.82      | 1.65      |
| SRR4018-4R7Y       | 4.7                | ±30    | 8      | 7.960                | 55             | 82            | 1.72      | 1.50      |
| SRR4018-5R6Y       | 5.6                | ±30    | 7      | 7.960                | 57             | 90            | 1.64      | 1.25      |
| SRR4018-6R8Y       | 6.8                | ±30    | 8      | 7.960                | 49             | 100           | 1.50      | 1.15      |
| SRR4018-8R2Y       | 8.2                | ±30    | 7      | 7.960                | 40             | 135           | 1.40      | 1.10      |
| SRR4018-100Y       | 10                 | ±30    | 10     | 2.520                | 38             | 150           | 1.30      | 1.00      |
| SRR4018-120Y       | 12                 | ±30    | 9      | 2.520                | 32             | 170           | 1.15      | 0.90      |
| SRR4018-150Y       | 15                 | ±30    | 8      | 2.520                | 30             | 220           | 1.03      | 0.82      |
| SRR4018-180Y       | 18                 | ±30    | 7      | 2.520                | 30             | 280           | 0.92      | 0.75      |
| SRR4018-220Y       | 22                 | ±30    | 7      | 2.520                | 29             | 300           | 0.88      | 0.65      |
| SRR4018-270Y       | 27                 | ±30    | 7      | 2.520                | 23             | 370           | 0.77      | 0.60      |
| SRR4018-330Y       | 33                 | ±30    | 7      | 2.520                | 21             | 420           | 0.73      | 0.50      |
| SRR4018-390Y       | 39                 | ±30    | 8      | 2.520                | 19             | 540           | 0.64      | 0.48      |
| SRR4018-470Y       | 47                 | ±30    | 8      | 2.520                | 20             | 600           | 0.62      | 0.45      |
| SRR4018-560Y       | 56                 | ±30    | 8      | 2.520                | 15             | 820           | 0.52      | 0.40      |
| SRR4018-680Y       | 68                 | ±30    | 7      | 2.520                | 13             | 860           | 0.50      | 0.38      |
| SRR4018-820Y       | 82                 | ±30    | 8      | 2.520                | 13             | 1200          | 0.43      | 0.32      |
| SRR4018-101Y       | 100                | ±30    | 10     | 0.796                | 12             | 1350          | 0.40      | 0.30      |
| SRR4018-121Y       | 120                | ±30    | 11     | 0.796                | 10             | 1950          | 0.33      | 0.28      |
| SRR4018-151Y       | 150                | ±30    | 14     | 0.796                | 10             | 2600          | 0.28      | 0.26      |
| SRR4018-181Y       | 180                | ±30    | 10     | 0.796                | 10             | 4000          | 0.18      | 0.25      |

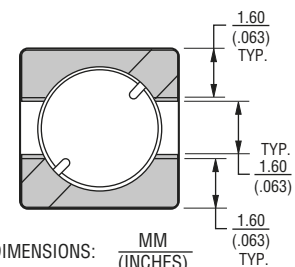
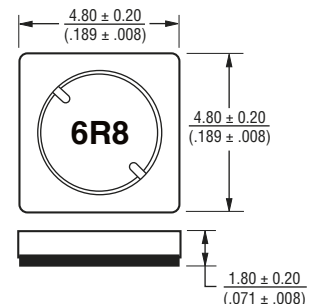
### General Specifications

Test Voltage ..... 0.1 V  
 Reflow Soldering ... 230 °C, 50 sec. max.  
 Operating Temp. .... -40 °C to +125 °C  
 (Temperature rise included)  
 Storage Temperature.. -40 °C to +125 °C  
 Resistance to Soldering Heat  
 ..... 260 °C for 10 sec.  
 Moisture Sensitivity Level..... 1  
 ESD Classification (HBM)..... N/A

### Materials

Core ..... Ferrite  
 Wire ..... Enameled copper  
 Adhesive..... Epoxy resin  
 Terminal..... Ag/Ni/Sn  
 Rated Current  
 ..... Ind. drop 35 % typ. at Isat  
 Temperature Rise..... 30 °C typ.  
 at rated Irms  
 Packaging..... 800 pcs. per reel

### Product Dimensions

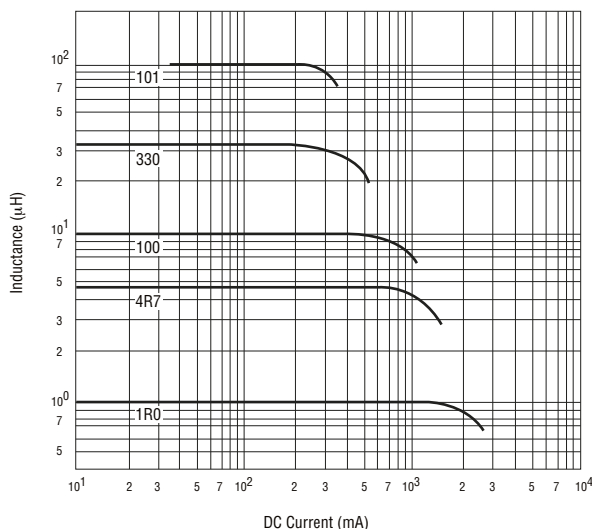


DIMENSIONS: MM (INCHES)

### Recommended Layout



### Inductance vs. Current



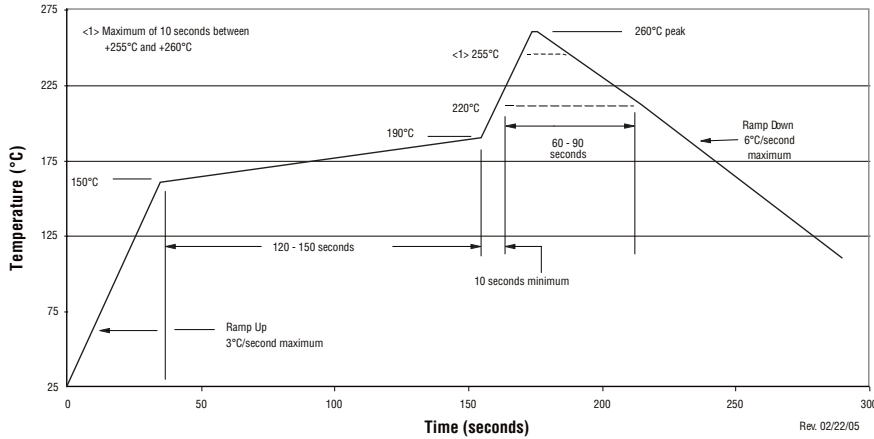
**WARNING Cancer and Reproductive Harm**  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

\*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.  
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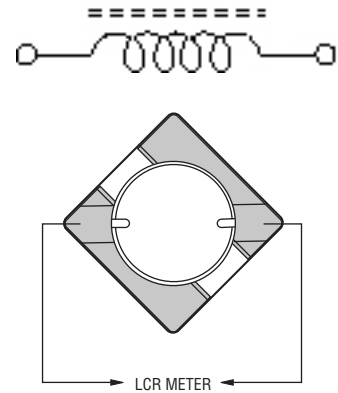
# SRR4018 Series - Shielded SMD Power Inductors



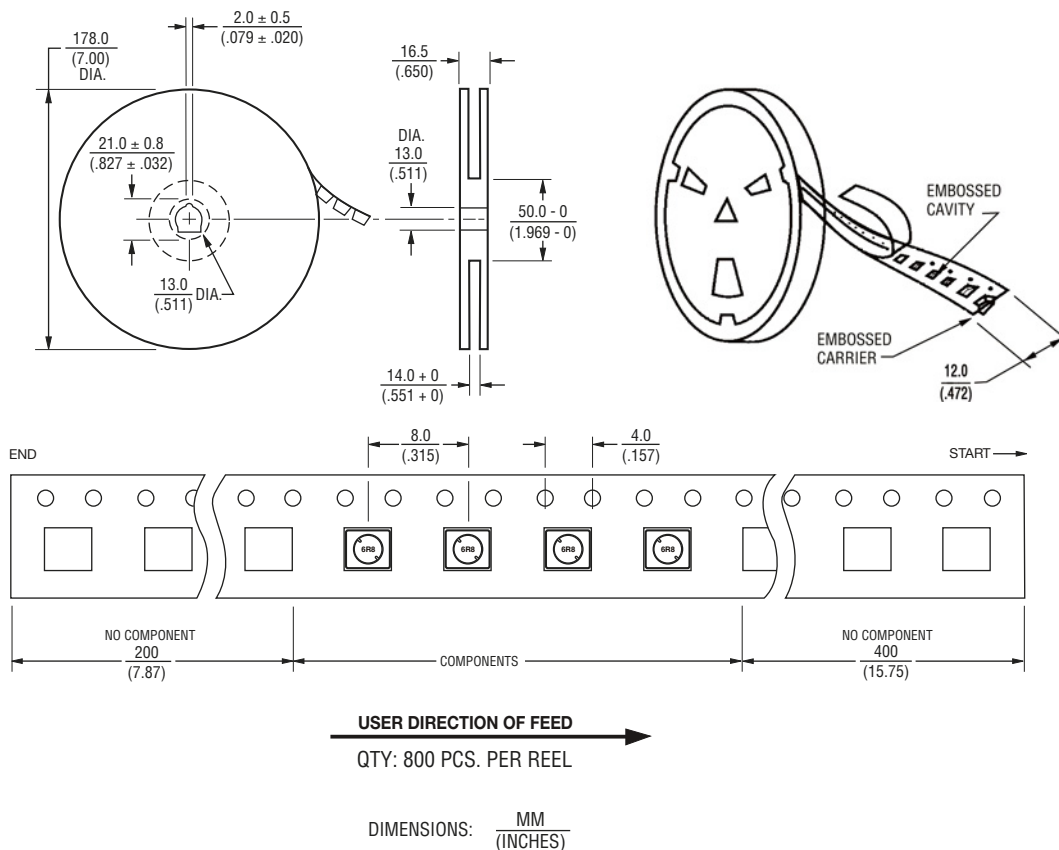
## Soldering Profile



## Electrical Schematic



## Packaging Specifications



REV. 03/18

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Users should verify actual device performance in their specific applications.

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