



## Features

- Height of 2.0 mm max.
- Current rating up to 3 A
- RoHS compliant\*

## Applications

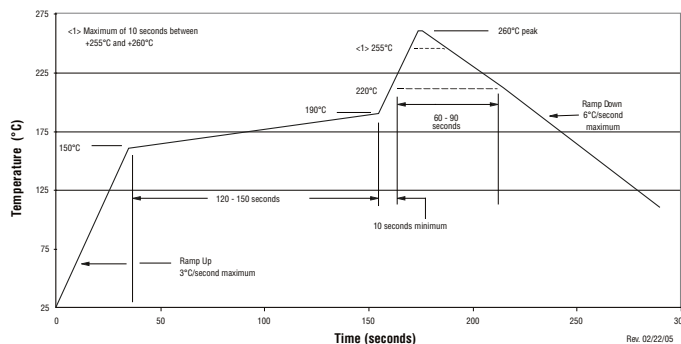
- Input/output of DC/DC converters
- Power supplies for:
  - Portable communication equipment
  - Camcorders
  - LCD TVs

# SRR5018 Series - Shielded Power Inductors

## Electrical Specifications

| Bourns Part No. | Inductance 100 KHz |          | Q Ref. | Test Frequency (MHz) | SRF Typ. (MHz) | DCR Max. (mΩ) | I rms (A) | I sat (A) |
|-----------------|--------------------|----------|--------|----------------------|----------------|---------------|-----------|-----------|
|                 | uH                 | Tol. (%) |        |                      |                |               |           |           |
| SRR5018-1R2Y    | 1.2                | ±30      | 9.2    | 7.96                 | 118            | 30            | 3.00      | 3.50      |
| SRR5018-1R8Y    | 1.8                | ±30      | 8.9    | 7.96                 | 93             | 35            | 2.60      | 3.00      |
| SRR5018-2R5Y    | 2.5                | ±30      | 8.6    | 7.96                 | 74             | 40            | 2.40      | 2.70      |
| SRR5018-3R0Y    | 3.0                | ±30      | 8.3    | 7.96                 | 79             | 45            | 2.20      | 2.40      |
| SRR5018-3R9Y    | 3.9                | ±30      | 8      | 7.96                 | 64             | 55            | 2.00      | 2.10      |
| SRR5018-4R1Y    | 4.1                | ±30      | 8      | 7.96                 | 60             | 55            | 2.00      | 2.10      |
| SRR5018-5R0Y    | 5.0                | ±30      | 7.9    | 7.96                 | 55             | 60            | 1.65      | 1.80      |
| SRR5018-5R4Y    | 5.4                | ±30      | 7.4    | 7.96                 | 58             | 76            | 1.65      | 1.65      |
| SRR5018-6R2Y    | 6.2                | ±30      | 7.5    | 7.96                 | 51             | 80            | 1.45      | 1.60      |
| SRR5018-7R5Y    | 7.5                | ±30      | 7.9    | 7.96                 | 42             | 90            | 1.35      | 1.50      |
| SRR5018-8R9Y    | 8.9                | ±30      | 7.3    | 7.96                 | 40             | 116           | 1.25      | 1.25      |
| SRR5018-9R0Y    | 9.0                | ±30      | 7.2    | 7.96                 | 37             | 110           | 1.25      | 1.35      |
| SRR5018-100Y    | 10                 | ±30      | 11     | 2.52                 | 41             | 130           | 1.10      | 1.25      |
| SRR5018-120Y    | 12                 | ±30      | 8.6    | 2.52                 | 39             | 160           | 1.00      | 1.15      |
| SRR5018-150Y    | 15                 | ±30      | 12.7   | 2.52                 | 32             | 190           | 0.95      | 1.10      |
| SRR5018-180Y    | 18                 | ±30      | 8.8    | 2.52                 | 29             | 210           | 0.90      | 1.00      |
| SRR5018-220Y    | 22                 | ±30      | 14.7   | 2.52                 | 22             | 280           | 0.80      | 0.90      |
| SRR5018-270Y    | 27                 | ±30      | 10.2   | 2.52                 | 21             | 320           | 0.75      | 0.80      |
| SRR5018-330Y    | 33                 | ±30      | 10.9   | 2.52                 | 20             | 350           | 0.65      | 0.70      |
| SRR5018-390Y    | 39                 | ±30      | 10.6   | 2.52                 | 17             | 500           | 0.55      | 0.65      |
| SRR5018-470Y    | 47                 | ±30      | 8.9    | 2.52                 | 14             | 550           | 0.52      | 0.60      |
| SRR5018-560Y    | 56                 | ±30      | 8.9    | 2.52                 | 13             | 600           | 0.48      | 0.55      |
| SRR5018-680Y    | 68                 | ±30      | 9.9    | 2.52                 | 12             | 850           | 0.40      | 0.50      |
| SRR5018-820Y    | 82                 | ±30      | 9.1    | 2.52                 | 11             | 950           | 0.38      | 0.45      |
| SRR5018-101Y    | 100                | ±30      | 13.1   | 0.796                | 10             | 1100          | 0.35      | 0.42      |
| SRR5018-121Y    | 120                | ±30      | 12.9   | 0.796                | 11             | 1420          | 0.30      | 0.40      |
| SRR5018-151Y    | 150                | ±30      | 11.8   | 0.796                | 11             | 1650          | 0.28      | 0.35      |
| SRR5018-181Y    | 180                | ±30      | 13.6   | 0.796                | 10             | 2300          | 0.25      | 0.32      |
| SRR5018-221Y    | 220                | ±30      | 8.7    | 0.796                | 8              | 2500          | 0.23      | 0.30      |

## Soldering Profile



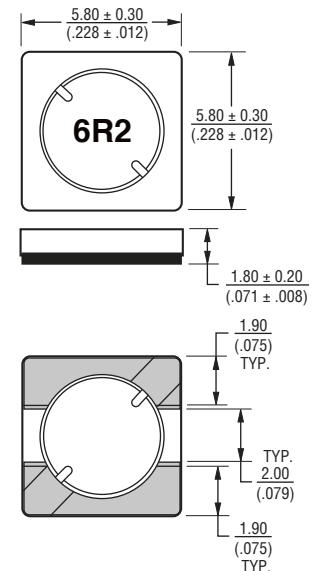
## General Specifications

Test Voltage ..... 0.1 V, 100 KHz  
 Reflow Soldering .. 230 °C, 50 sec. max.  
 Operating Temperature ..... -40 °C to +125 °C  
 (Temperature rise included)  
 Storage Temperature .. -40 °C to +125 °C  
 Resistance to Soldering Heat ..... 260 °C, 10 sec.  
 Moisture Sensitivity Level..... 1  
 ESD Classification (HBM)..... N/A

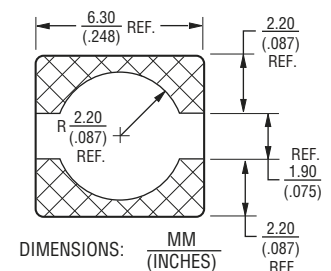
## Materials

Core..... Ferrite  
 Wire ..... Enameled copper  
 Adhesive..... Epoxy resin  
 Terminal..... Ag/Ni/Sn  
 Rated Current ..... Ind. drop of 35 % typ. at Isat  
 Temp. Rise ..... 40 °C typ. at rated Irms  
 Packaging..... 500 pcs. per reel

## Product Dimensions



## Recommended Layout



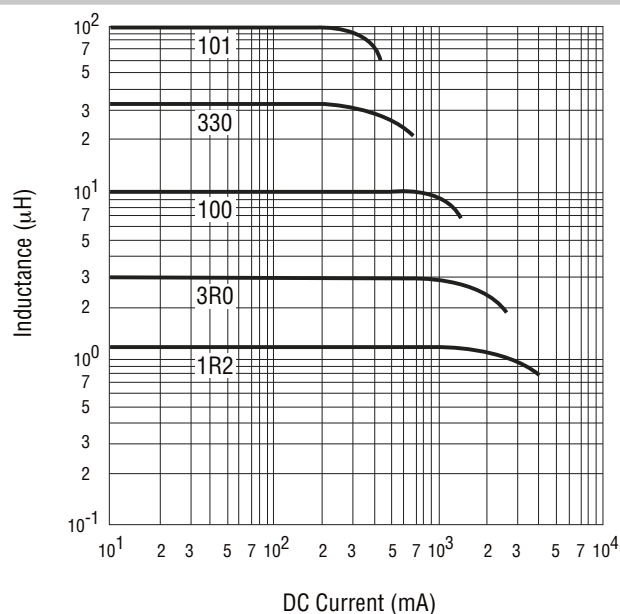
**WARNING Cancer and Reproductive Harm**  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

\*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.  
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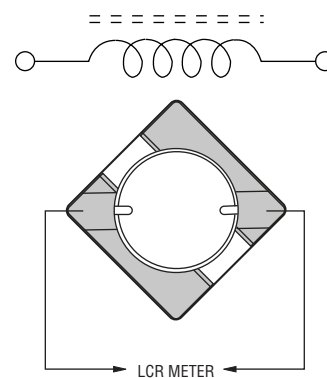
# SRR5018 Series - Shielded Power Inductors

**BOURNS®**

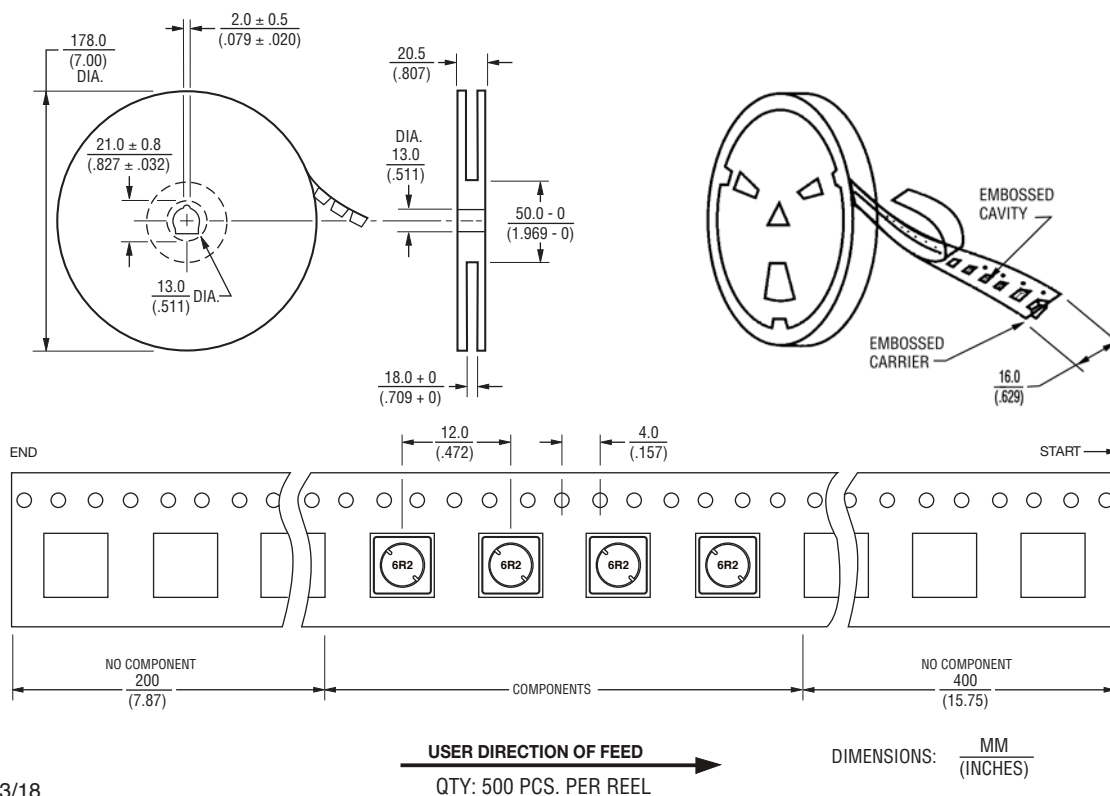
## Inductance vs. Current



## Electrical Schematic



## Packaging Specifications



REV. 03/18

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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