



**THE DATASHEET OF  
SRU1063A-680Y**





## Features

- Shielded construction
- Inductance range: 4.7 to 100  $\mu$ H
- Heating current up to 5.5 A
- Dimensions: 10 x 10 x 6.5 mm
- AEC-Q200 qualified
- RoHS compliant\* and halogen free\*\*

## SRU1063A Series - Shielded Power Inductors

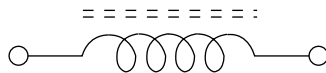
### Electrical Specifications @ 25 °C

| Bourns Part Number | Inductance @ 100 kHz / 0.1 V |          | Q Ref. | Test Freq. (MHz) | SRF Typ. (MHz) | DCR ( $\Omega$ ) |       | I rms (A) | I sat (A) |
|--------------------|------------------------------|----------|--------|------------------|----------------|------------------|-------|-----------|-----------|
|                    | L ( $\mu$ H)                 | Tol. (%) |        |                  |                | Typ.             | Max.  |           |           |
| SRU1063A-4R7Y      | 4.7                          | $\pm 30$ | 11     | 7.96             | 30             | 0.011            | 0.014 | 5.5       | 5.7       |
| SRU1063A-6R8Y      | 6.8                          | $\pm 30$ | 11     | 7.96             | 20             | 0.0145           | 0.018 | 5.2       | 5.2       |
| SRU1063A-100Y      | 10                           | $\pm 30$ | 14     | 2.52             | 18             | 0.027            | 0.038 | 3.8       | 4.0       |
| SRU1063A-150Y      | 15                           | $\pm 30$ | 12     | 2.52             | 14             | 0.03             | 0.042 | 3.2       | 3.4       |
| SRU1063A-220Y      | 22                           | $\pm 30$ | 15     | 2.52             | 10             | 0.043            | 0.06  | 3.0       | 3.2       |
| SRU1063A-330Y      | 33                           | $\pm 30$ | 12     | 2.52             | 8              | 0.075            | 0.105 | 2.2       | 2.4       |
| SRU1063A-470Y      | 47                           | $\pm 30$ | 10     | 2.52             | 6              | 0.105            | 0.15  | 1.4       | 1.6       |
| SRU1063A-680Y      | 68                           | $\pm 30$ | 8      | 2.52             | 5              | 0.15             | 0.21  | 1.2       | 1.35      |
| SRU1063A-101Y      | 100                          | $\pm 30$ | 12     | 0.796            | 4              | 0.24             | 0.32  | 1.1       | 1.2       |

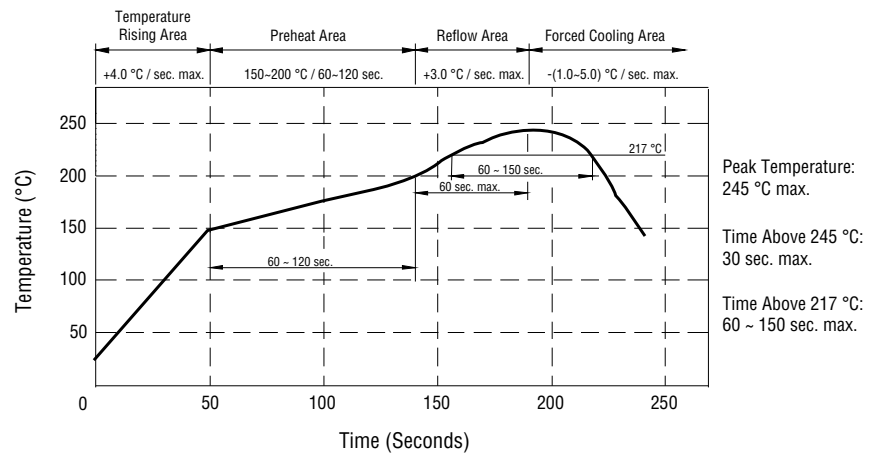
### How to Order

Model SRU1063A - 100Y  
 Value Code (see table)

### Electrical Schematic



### Soldering Profile



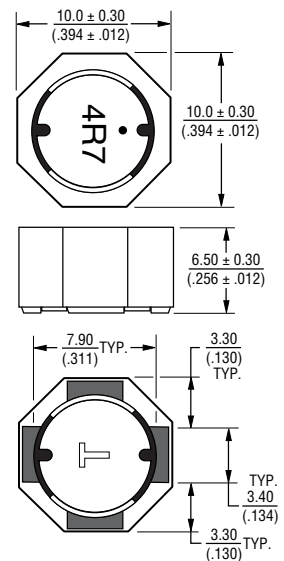
### General Specifications

Operating Temperature ..... -40 °C to +125 °C  
 (Temperature rise included)  
 Storage Temperature... -40 °C to +125 °C  
 Temperature Rise ..... 40 °C typ. at rated I rms  
 Inductance drop..... 35 % at I sat  
 Failure In Time (FIT) ..... 24.7/10<sup>9</sup> hours  
 Mean Time Between Failures (MTBF) ..... 40.4 x 10<sup>6</sup> hours

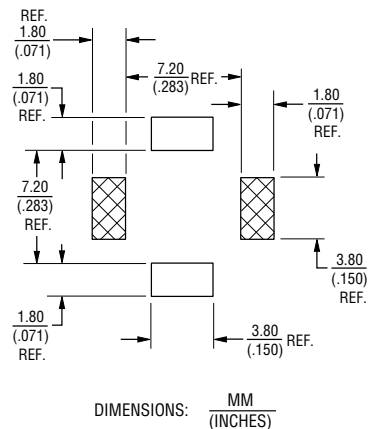
### Materials

Core..... Ferrite  
 Wire..... Enameled copper  
 Terminal..... Sn  
 Packaging ..... 500 pcs. per reel

### Product Dimensions



### Recommended Layout



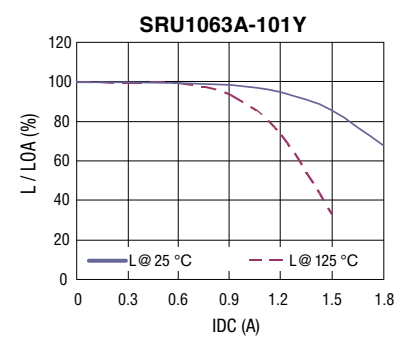
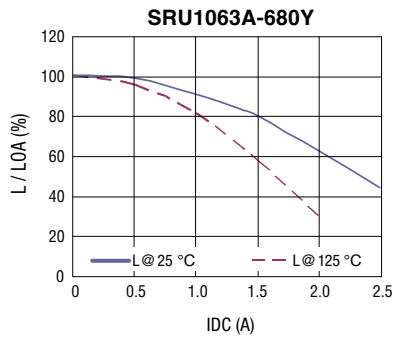
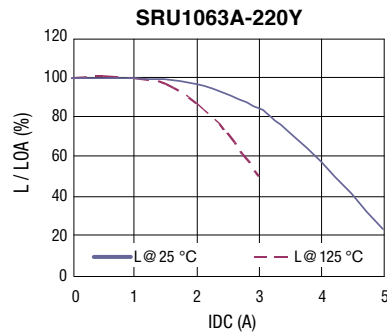
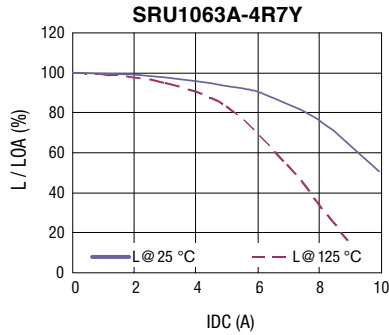
**WARNING Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)**

\* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.  
 \*\*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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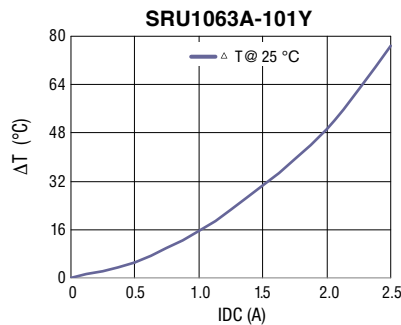
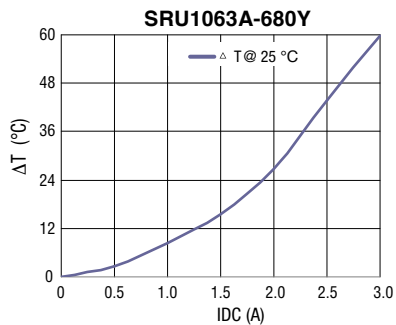
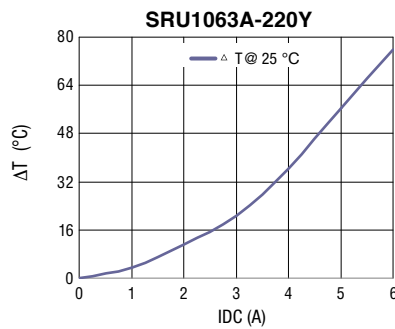
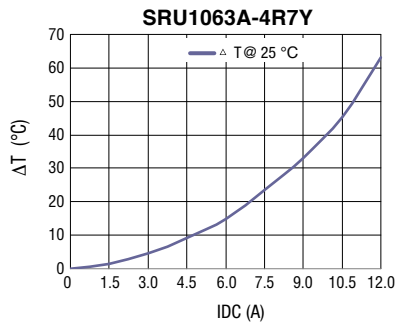
# SRU1063A Series - Shielded Power Inductors

**BOURNS®**

## Inductance vs. IDC



## Temperature vs. IDC

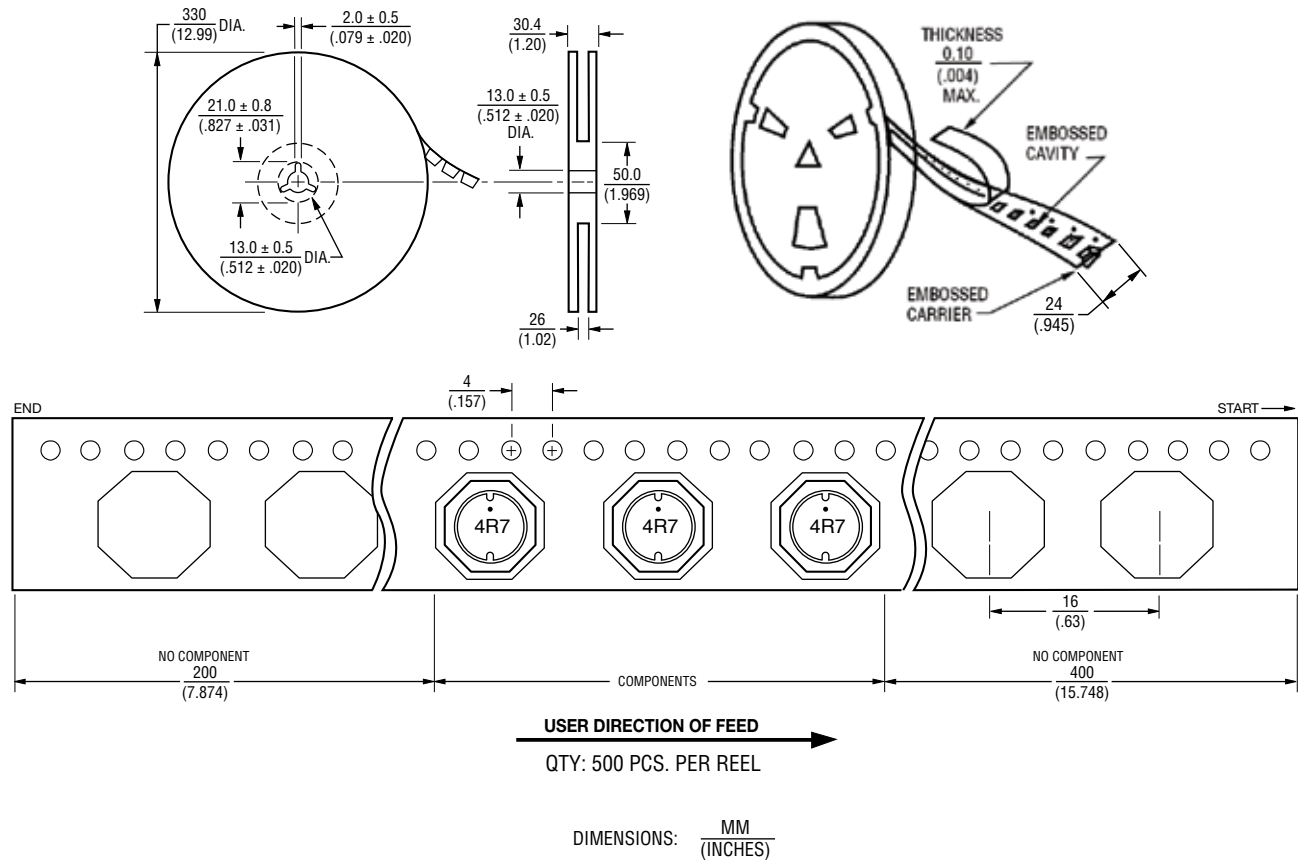


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## Packaging Specifications



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