



## Features

- Shielded construction
- Inductance range: 1.2 to 100  $\mu$ H
- Heating current up to 3.5 A
- AEC-Q200 qualified
- RoHS compliant\* and halogen free\*\*

## SRU5028A Series - Shielded Power Inductors

### Electrical Specifications @ 25 °C

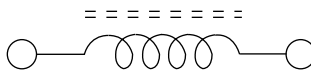
| Bourns Part Number | Inductance @ 100 KHz / 0.1 V |          | Q (Ref.) | Test Freq. (MHz) | SRF (MHz) Typ. | DCR ( $\Omega$ ) Max. | I rms (A) | I sat (A) |
|--------------------|------------------------------|----------|----------|------------------|----------------|-----------------------|-----------|-----------|
|                    | L ( $\mu$ H)                 | Tol. (%) |          |                  |                |                       |           |           |
| SRU5028A-1R2Y      | 1.2                          | $\pm 30$ | 10       | 7.96             | 200            | 0.022                 | 3.5       | 3.4       |
| SRU5028A-2R2Y      | 2.2                          | $\pm 30$ | 10       | 7.96             | 130            | 0.027                 | 3.2       | 2.5       |
| SRU5028A-3R3Y      | 3.3                          | $\pm 30$ | 10       | 7.96             | 90             | 0.032                 | 2.8       | 2.1       |
| SRU5028A-4R7Y      | 4.7                          | $\pm 30$ | 9        | 7.96             | 50             | 0.045                 | 2.2       | 1.85      |
| SRU5028A-6R8Y      | 6.8                          | $\pm 30$ | 10       | 7.96             | 45             | 0.056                 | 2.0       | 1.55      |
| SRU5028A-100Y      | 10                           | $\pm 30$ | 18       | 2.52             | 25             | 0.085                 | 1.8       | 1.4       |
| SRU5028A-150Y      | 15                           | $\pm 30$ | 18       | 2.52             | 23             | 0.14                  | 1.1       | 1.0       |
| SRU5028A-220Y      | 22                           | $\pm 30$ | 15       | 2.52             | 18             | 0.21                  | 0.95      | 0.85      |
| SRU5028A-330Y      | 33                           | $\pm 30$ | 15       | 2.52             | 16             | 0.26                  | 0.8       | 0.68      |
| SRU5028A-470Y      | 47                           | $\pm 30$ | 13       | 2.52             | 13             | 0.36                  | 0.7       | 0.62      |
| SRU5028A-680Y      | 68                           | $\pm 30$ | 13       | 2.52             | 10             | 0.55                  | 0.56      | 0.46      |
| SRU5028A-101Y      | 100                          | $\pm 30$ | 15       | 0.796            | 8              | 0.8                   | 0.47      | 0.42      |

### How to Order

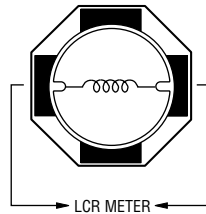
SRU5028A - 100Y

Model \_\_\_\_\_  
Value Code (see table) \_\_\_\_\_

### Electrical Schematic



### Inductor Connection



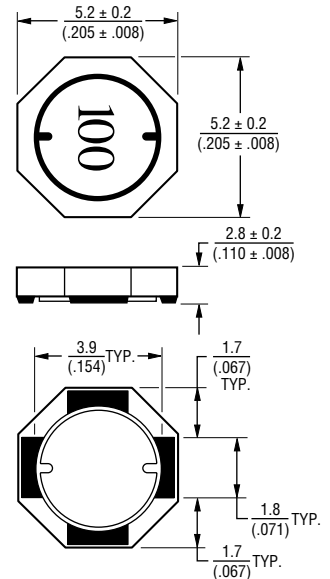
### General Specifications

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 % typ. at I sat

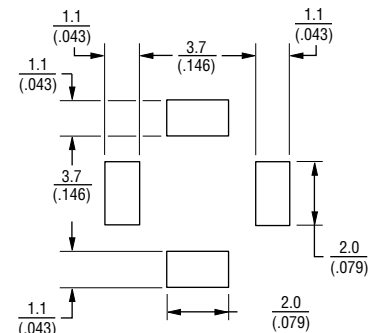
### Materials

Core .....Ferrite  
Wire .....Enameled copper  
Terminal Finish .....Ag/Ni/Sn  
Packaging .....600 pcs. per 7" reel

### Product Dimensions



### Recommended Layout



DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

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

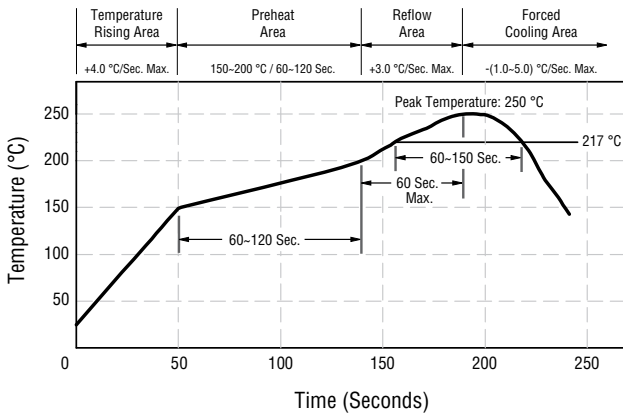
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# SRU5028A Series - Shielded Power Inductors

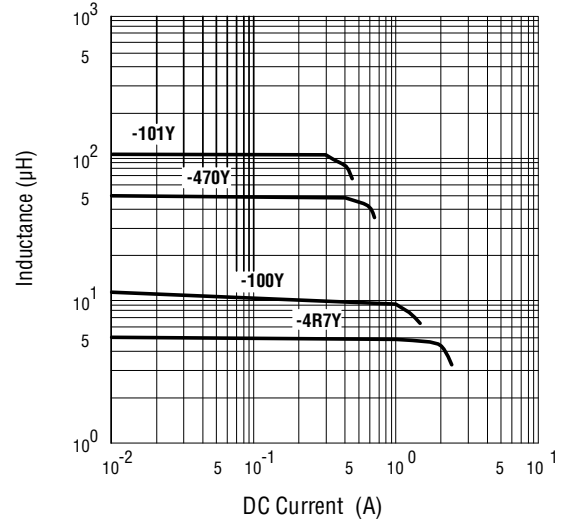


## Soldering Profile

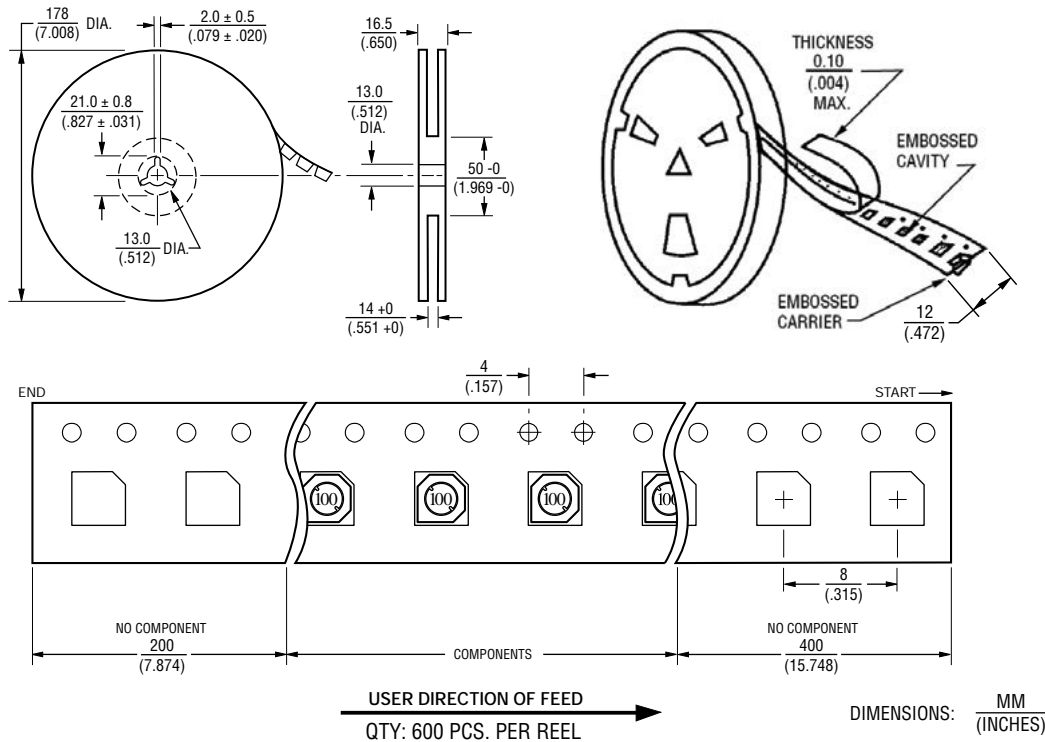
Peak Temperature: 250 °C max.  
 Max. Peak Temperature -5°C: 30 sec. max.  
 Max. Time Above 217°C: 60-150 sec. max.



## Inductance vs. DC Current Plot



## Packaging Specifications



REV. 11/19

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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