



## 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

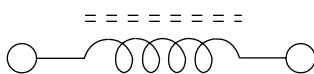
| Bourns<br>Part Number | Inductance<br>@ 100 KHz / 0.1 V |          | Q<br>(Ref.) | Test<br>Freq.<br>(MHz) | SRF<br>(MHz)<br>Typ. | DCR<br>( $\Omega$ )<br>Max. | I rms<br>(A) | I sat<br>(A) |
|-----------------------|---------------------------------|----------|-------------|------------------------|----------------------|-----------------------------|--------------|--------------|
|                       | 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

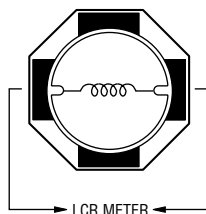
**SRU5028A - 100Y**

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

### Electrical Schematic



### Inductor Connection



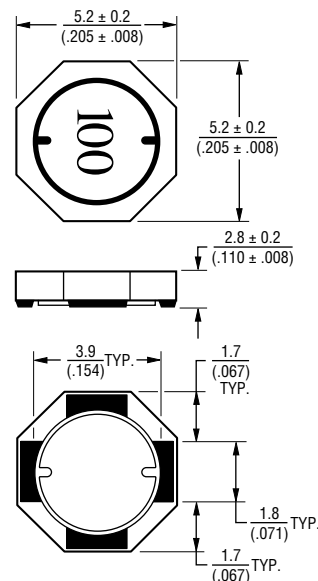
### General Specifications

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

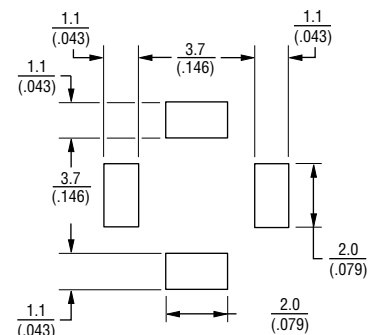
### Materials

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.

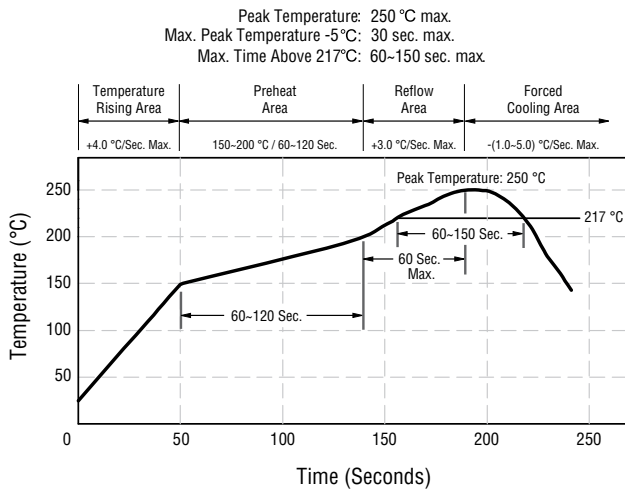
\*\* Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

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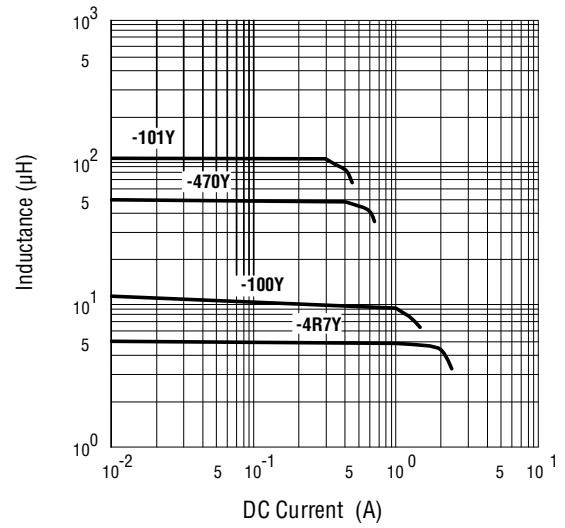
## SRU5028A Series - Shielded Power Inductors

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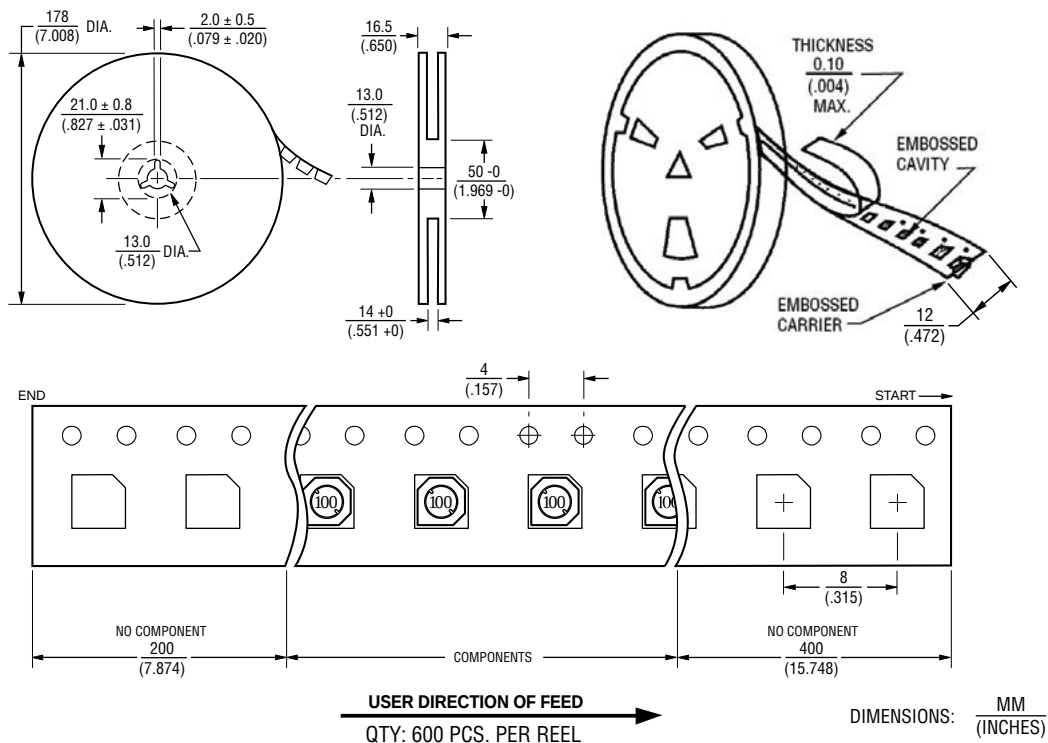
### Soldering Profile



### Inductance vs. DC Current Plot



### Packaging Specifications



REV. 11/19

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