



**THE DATASHEET OF  
SRU6025A-330Y**





## Features

- Shielded construction
- Inductance range: 1.2 to 220  $\mu$ H
- Heating current up to 4 A
- AEC-Q200 qualified
- RoHS compliant\* and halogen free\*\*

## SRU6025A Series - Shielded Power Inductors

### Electrical Specifications @ 25 °C

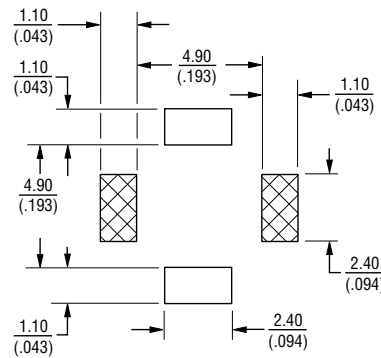
| Bourns Part Number | Inductance @ 100 KHz / 0.1 V |          | Q (Ref.) | Test Freq. (MHz) | SRF (MHz) Typ. | DCR ( $\Omega$ ) Max. | I rms (A) | I sat (A) |
|--------------------|------------------------------|----------|----------|------------------|----------------|-----------------------|-----------|-----------|
|                    | L ( $\mu$ H)                 | Tol. (%) |          |                  |                |                       |           |           |
| SRU6025A-1R2Y      | 1.2                          | $\pm$ 30 | 8        | 7.96             | 120            | 0.019                 | 4.0       | 3.2       |
| SRU6025A-2R2Y      | 2.2                          | $\pm$ 30 | 8        | 7.96             | 65             | 0.024                 | 3.4       | 2.35      |
| SRU6025A-3R3Y      | 3.3                          | $\pm$ 30 | 8        | 7.96             | 50             | 0.027                 | 3.2       | 2.0       |
| SRU6025A-4R7Y      | 4.7                          | $\pm$ 30 | 8        | 7.96             | 42             | 0.035                 | 2.7       | 1.55      |
| SRU6025A-6R8Y      | 6.8                          | $\pm$ 30 | 8        | 7.96             | 36             | 0.042                 | 2.4       | 1.3       |
| SRU6025A-8R2Y      | 8.2                          | $\pm$ 30 | 8        | 7.96             | 30             | 0.052                 | 2.2       | 1.25      |
| SRU6025A-100Y      | 10                           | $\pm$ 30 | 12       | 2.52             | 25             | 0.057                 | 2.0       | 1.05      |
| SRU6025A-150Y      | 15                           | $\pm$ 30 | 12       | 2.52             | 22             | 0.086                 | 1.8       | 0.92      |
| SRU6025A-220Y      | 22                           | $\pm$ 30 | 12       | 2.52             | 18             | 0.13                  | 1.6       | 0.7       |
| SRU6025A-330Y      | 33                           | $\pm$ 30 | 12       | 2.52             | 12             | 0.18                  | 1.2       | 0.64      |
| SRU6025A-470Y      | 47                           | $\pm$ 30 | 12       | 2.52             | 10             | 0.25                  | 1.0       | 0.48      |
| SRU6025A-680Y      | 68                           | $\pm$ 30 | 10       | 2.52             | 8              | 0.365                 | 0.8       | 0.4       |
| SRU6025A-101Y      | 100                          | $\pm$ 30 | 24       | 0.796            | 7              | 0.5                   | 0.7       | 0.35      |
| SRU6025A-151Y      | 150                          | $\pm$ 30 | 30       | 0.796            | 5              | 0.77                  | 0.54      | 0.28      |
| SRU6025A-221Y      | 220                          | $\pm$ 30 | 20       | 0.796            | 4              | 1.25                  | 0.42      | 0.24      |

### How to Order

SRU6025A - 100Y

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

### Recommended Layout



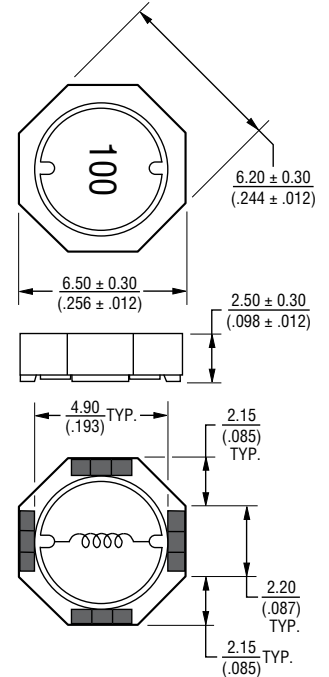
### General Specifications

Operating Temperature .....-40 °C to +125 °C  
(Temperature rise included)  
Storage Temperature .....-40 °C to +125 °C  
Temperature Rise .....30 °C typ. at rated I rms  
Inductance Drop .....35 % typ. at I sat

### Materials

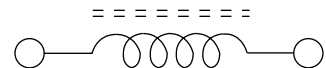
Core .....Ferrite  
Wire .....Enameled copper  
Terminal Finish .....Ag/Ni/Sn  
Packaging .....600 pcs. per reel

### Product Dimensions



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

### Electrical Schematic



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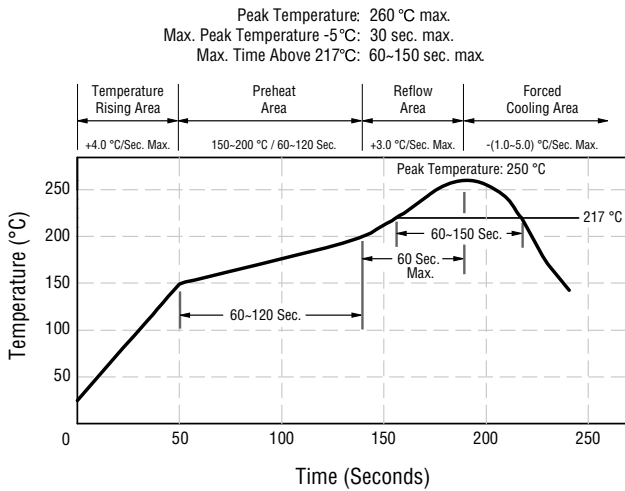
**WARNING Cancer and Reproductive Harm** [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

\* 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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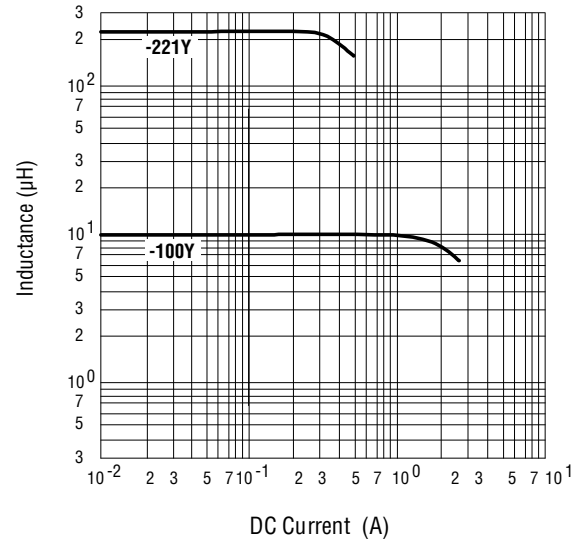
# SRU6025A Series - Shielded Power Inductors



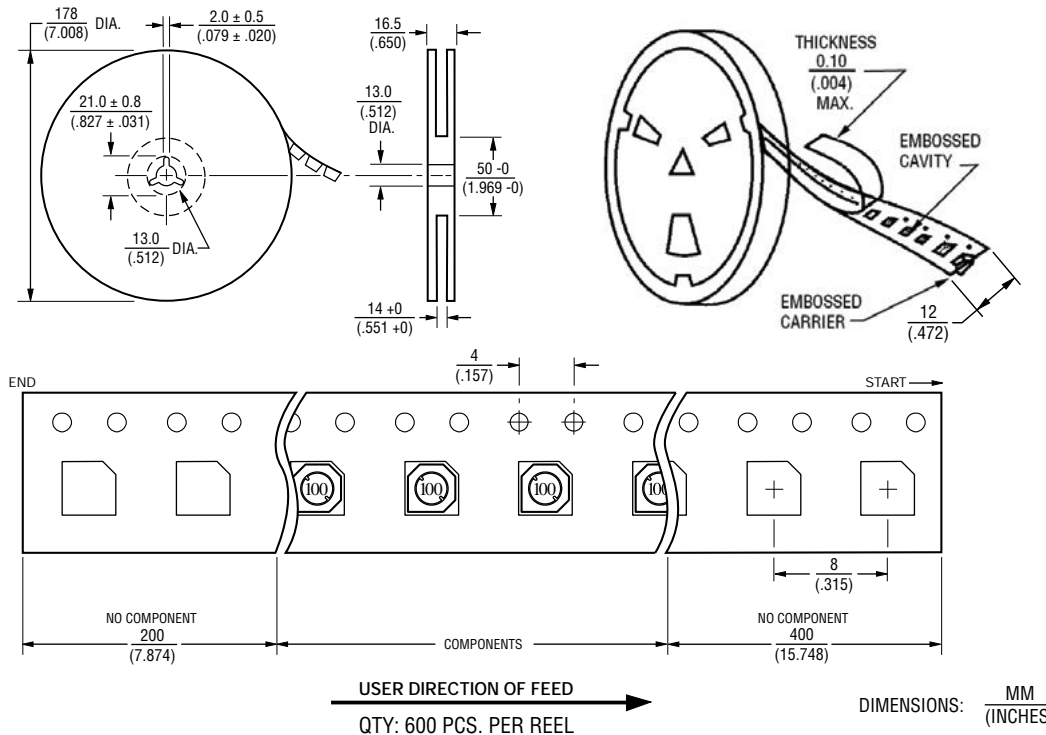
## Soldering Profile



## 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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