



**THE DATASHEET OF  
SRU5028A-4R7Y**





## Features

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

## SRU5028A Series - Shielded Power Inductors

### Electrical Specifications @ 25 °C

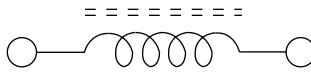
Bourns Part Number	Inductance @ 100 KHz / 0.1 V		Q (Ref.)	Test Freq. (MHz)	SRF (MHz) Typ.	DCR ( $\Omega$ ) Max.	I rms (A)	I sat (A)
	L ( $\mu\text{H}$ )	Tol. (%)						
SRU5028A-1R2Y	1.2	$\pm 30$	10	7.96	200	0.022	3.5	3.4
SRU5028A-2R2Y	2.2	$\pm 30$	10	7.96	130	0.027	3.2	2.5
SRU5028A-3R3Y	3.3	$\pm 30$	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

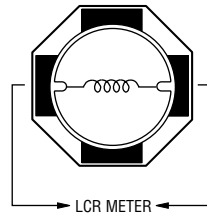
SRU5028A - 100Y

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

### Electrical Schematic



### Inductor Connection



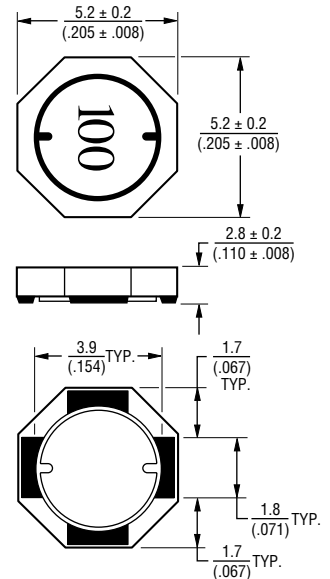
### General Specifications

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

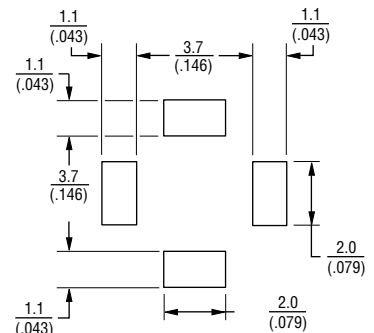
### Materials

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.

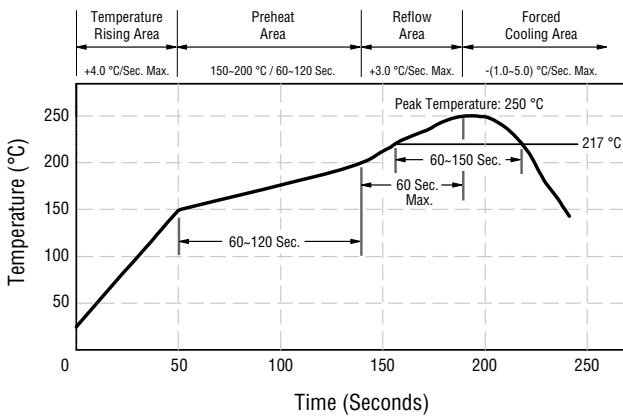
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# SRU5028A Series - Shielded Power Inductors

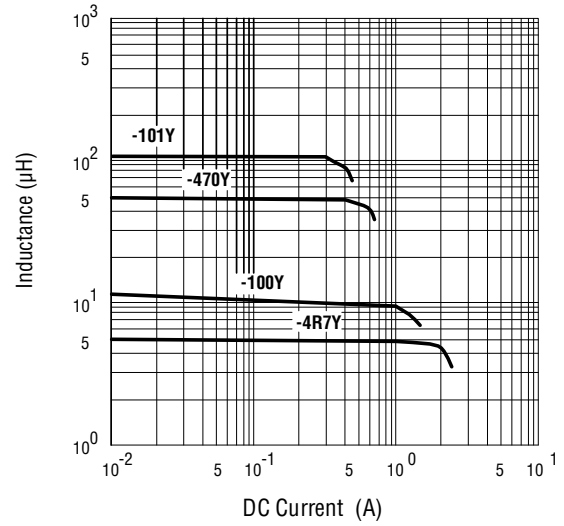


## Soldering Profile

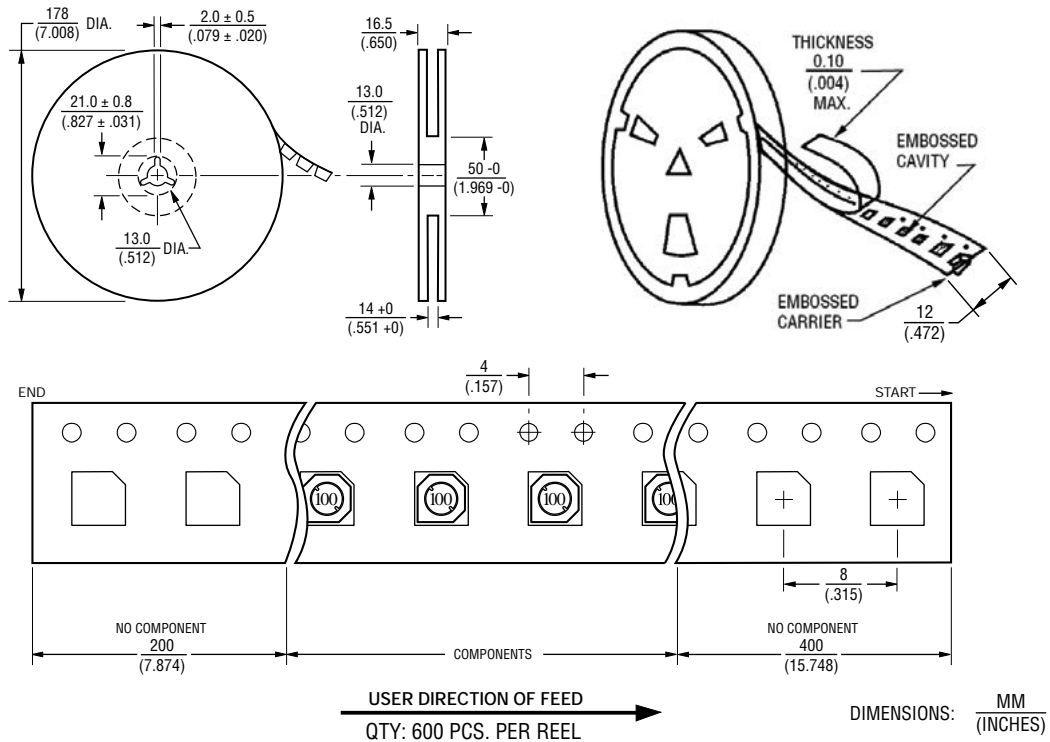
Peak Temperature: 250 °C max.  
 Max. Peak Temperature -5°C: 30 sec. max.  
 Max. Time Above 217°C: 60-150 sec. max.



## 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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