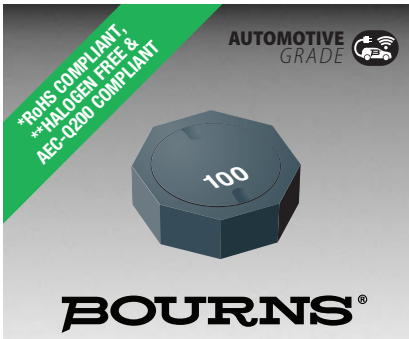




**THE DATASHEET OF  
SRU1038A-5R0Y**





## Features

- Shielded construction
- Inductance range: 1.5 to 330  $\mu$ H
- Heating current up to 7.2 A
- AEC-Q200 compliant
- RoHS compliant\* and halogen free\*\*

## SRU1038A Series - Shielded Power Inductors

### Electrical Specifications @ 25 °C

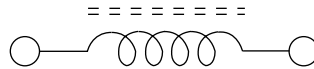
Bourns Part Number	Inductance @ 100 KHz / 1 V		Q (Ref.)	Test Freq. (MHz)	SRF (MHz) Typ.	DCR (m $\Omega$ ) Max.	I rms (A)	I sat (A)
	L ( $\mu$ H)	Tol. (%)						
SRU1038A-1R5Y	1.5	$\pm$ 30	14	7.96	65	7.5	7.2	7.0
SRU1038A-2R2Y	2.2	$\pm$ 30	12	7.96	55	10.5	6.8	6.5
SRU1038A-3R5Y	3.5	$\pm$ 30	14	7.96	35	15	5.5	5.5
SRU1038A-5R0Y	5.0	$\pm$ 30	12	7.96	30	22	4.6	4.8
SRU1038A-6R2Y	6.2	$\pm$ 30	12	7.96	25	24	4.0	4.2
SRU1038A-100Y	10	$\pm$ 30	24	2.52	20	35	3.8	3.6
SRU1038A-150Y	15	$\pm$ 30	24	2.52	16	50	2.8	2.7
SRU1038A-220Y	22	$\pm$ 30	20	2.52	12	75	2.2	2.3
SRU1038A-330Y	33	$\pm$ 30	22	2.52	10	112	1.8	1.8
SRU1038A-470Y	47	$\pm$ 30	22	2.52	8	160	1.65	1.6
SRU1038A-680Y	68	$\pm$ 30	24	2.52	7	216	1.1	1.3
SRU1038A-101Y	100	$\pm$ 30	24	0.796	6	300	1.0	1.1
SRU1038A-151Y	150	$\pm$ 30	20	0.796	5	476	0.9	0.8
SRU1038A-221Y	220	$\pm$ 30	22	0.796	4	740	0.65	0.65
SRU1038A-331Y	330	$\pm$ 30	20	0.796	3	1000	0.55	0.52

### How to Order

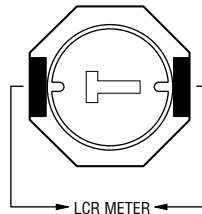
**SRU1038A - 100Y**

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

### Electrical Schematic



### Inductor Connection



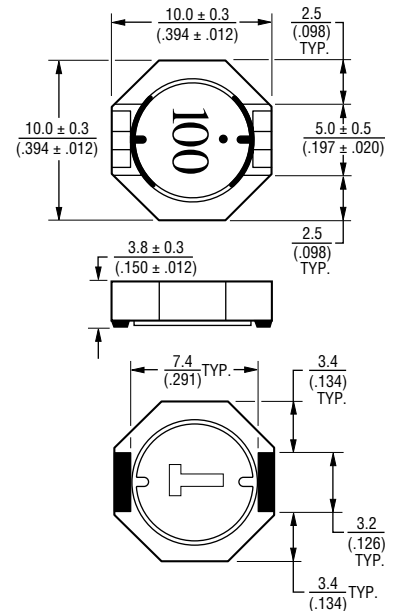
### General Specifications

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

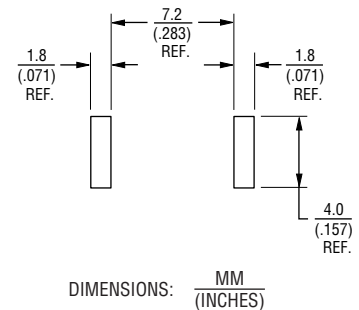
### Materials

Core .....Ferrite  
Wire .....Enameled copper  
Terminal Finish .....Ag/Ni/Sn  
Packaging .....800 pcs. per reel

### Product Dimensions



### Recommended Layout



## BOURNS®

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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.

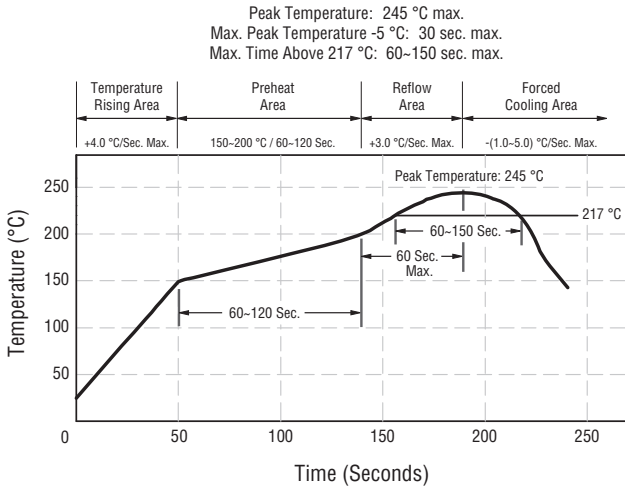
\*\* Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

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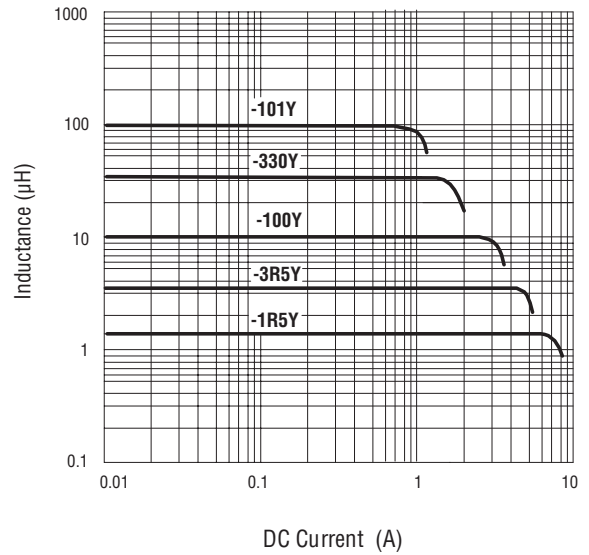
# SRU1038A Series - Shielded Power Inductors



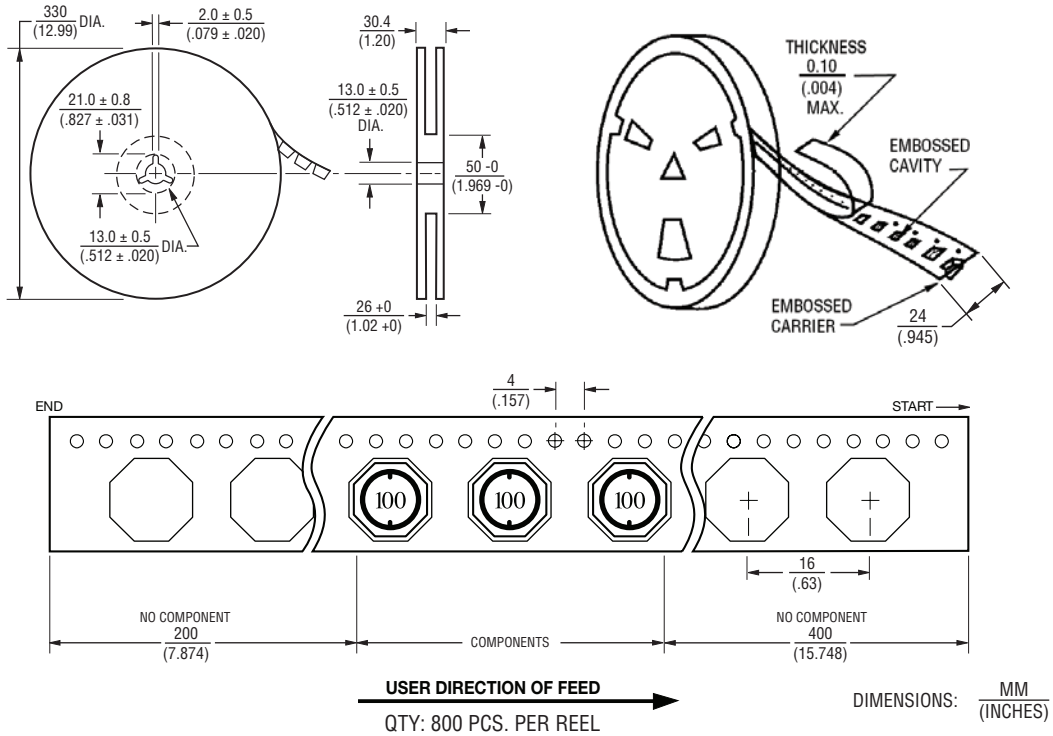
## Soldering Profile



## Inductance vs. DC Current Plot



## Packaging Specifications



REV. 09/20

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Users should verify actual device performance in their specific applications.

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