



## Features

- Shielded construction
- Inductance range: 1.5 to 330  $\mu$ H
- Heating current up to 7 A
- AEC-Q200 qualified
- RoHS compliant\* and halogen free\*\*

## Applications

- Automotive systems:
  - Driver assistant
  - Information
  - Entertainment
  - Lighting
- DC/DC converters
- Power supplies

## SRU1048A Series - Shielded Power Inductors

### Electrical Specifications @ 25 °C

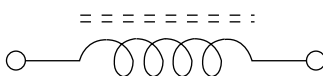
Bourns Part Number	Inductance @ 100 KHz / 1 V		Q (Ref.)	Test Freq. (MHz)	SRF (MHz) Typ.	DCR (m $\Omega$ ) Max.	I rms (A)	I sat (A)
	L ( $\mu$ H)	Tol. (%)						
SRU1048A-1R5Y	1.5	$\pm 30$	14	7.96	70	5.8	7.0	7.2
SRU1048A-2R2Y	2.2	$\pm 30$	14	7.96	55	7.2	6.5	6.3
SRU1048A-3R0Y	3.0	$\pm 30$	14	7.96	40	10	6.2	6.0
SRU1048A-4R7Y	4.7	$\pm 30$	12	7.96	30	12.5	5.5	4.75
SRU1048A-6R8Y	6.8	$\pm 30$	10	7.96	20	18	4.8	4.1
SRU1048A-8R2Y	8.2	$\pm 30$	8	7.96	18	20	4.6	3.8
SRU1048A-100Y	10	$\pm 30$	26	2.52	16	25	4.5	3.7
SRU1048A-150Y	15	$\pm 30$	30	2.52	14	40	3.2	2.7
SRU1048A-220Y	22	$\pm 30$	22	2.52	12	55	2.6	2.0
SRU1048A-330Y	33	$\pm 30$	24	2.52	10	84	2.1	1.7
SRU1048A-470Y	47	$\pm 30$	26	2.52	8	120	1.7	1.5
SRU1048A-560Y	56	$\pm 30$	26	2.52	7	145	1.6	1.4
SRU1048A-680Y	68	$\pm 30$	24	2.52	6	170	1.4	1.25
SRU1048A-820Y	82	$\pm 30$	24	2.52	5.5	200	1.3	1.1
SRU1048A-101Y	100	$\pm 30$	26	0.796	5	220	1.2	1.0
SRU1048A-151Y	150	$\pm 30$	24	0.796	4.5	305	1.0	0.8
SRU1048A-221Y	220	$\pm 30$	20	0.796	4	455	0.8	0.7
SRU1048A-331Y	330	$\pm 30$	18	0.796	3	640	0.65	0.52

### How to Order

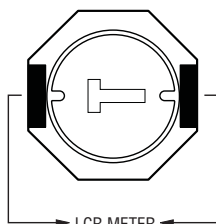
**SRU1048A - 100Y**

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

### Electrical Schematic



### Inductor Connection



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\* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

\*\* Bourns follows the prevailing definition of "halogen free" in the industry. 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.

Specifications are subject to change without notice.

The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.

Users should verify actual device performance in their specific applications.

### General Specifications

#### Operating Temperature

.....-40 °C to +125 °C  
(Temperature rise included)

#### Storage Temperature

.....-40 °C to +125 °C

#### Resistance to Soldering Heat

.....+245 °C for 10 sec.

#### Temperature Rise

.....30 °C typ. at rated I rms

Inductance Drop .....35 % typ. at I sat

### Materials

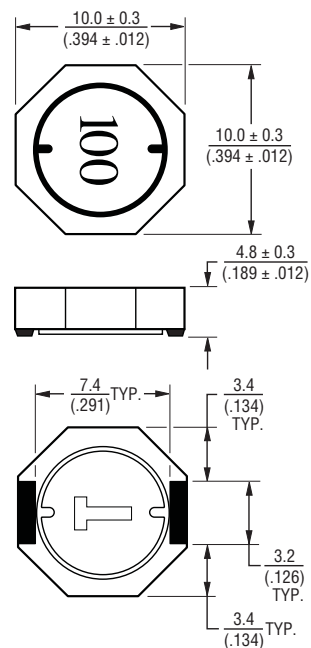
Core.....Ferrite

Wire.....Enameled copper

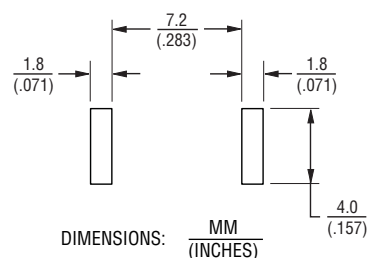
Terminal Finish.....Ag/Ni/Sn

Packaging.....600 pcs. per reel

### Product Dimensions



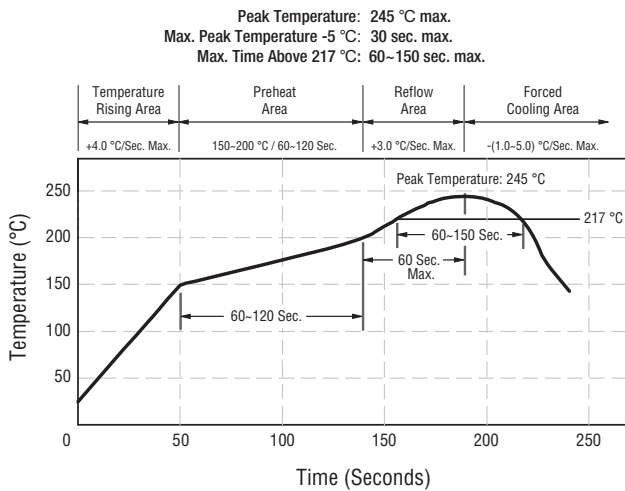
### Recommended Layout



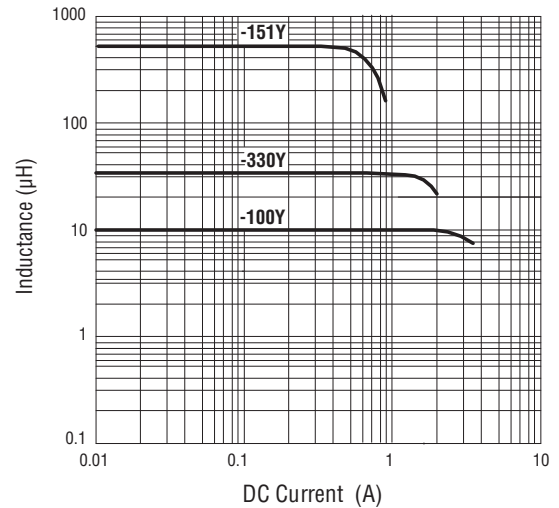
# SRU1048A Series - Shielded Power Inductors

**BOURNS®**

## Soldering Profile



## Inductance vs. DC Current Plot



## Packaging Specifications

