

## Features

- Shielded construction
- Inductance range: 3.5 to 100  $\mu$ H
- Rated current up to 5 A
- AEC-Q200 qualified
- RoHS compliant\* and halogen free\*\*

## SRU8045A Series – Shielded Power Inductors

### Electrical Specifications @ 25 °C

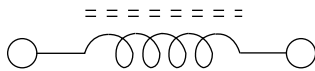
Bourns Part Number	Inductance @ 100 kHz / 0.1 V		Q (Ref.)	Test Freq. (MHz)	SRF (MHz) Typ.	DCR ( $\Omega$ )		I rms (A)	I sat (A)
	L ( $\mu$ H)	Tol. (%)				Typ.	Max.		
SRU8045A-3R5Y	3.5	$\pm 30$	12	7.96	45	0.0188	0.025	5.00	5.00
SRU8045A-4R7Y	4.7	$\pm 30$	10	7.96	30	0.022	0.0275	4.60	4.40
SRU8045A-6R2Y	6.2	$\pm 30$	10	7.96	23	0.0285	0.036	4.20	3.80
SRU8045A-100Y	10	$\pm 30$	16	2.52	18	0.035	0.048	3.50	3.30
SRU8045A-220Y	22	$\pm 30$	18	2.52	12	0.094	0.122	2.25	2.15
SRU8045A-330Y	33	$\pm 30$	14	2.52	8	0.118	0.15	2.00	1.80
SRU8045A-470Y	47	$\pm 30$	12	2.52	6	0.215	0.27	1.45	1.40
SRU8045A-680Y	68	$\pm 30$	8	2.52	4	0.32	0.40	1.25	1.20
SRU8045A-101Y	100	$\pm 30$	20	0.796	3	0.40	0.50	1.00	0.92

### How to Order

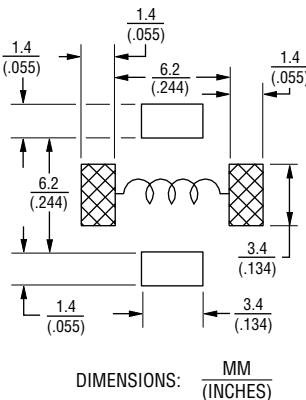
SRU8045A - 100Y

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

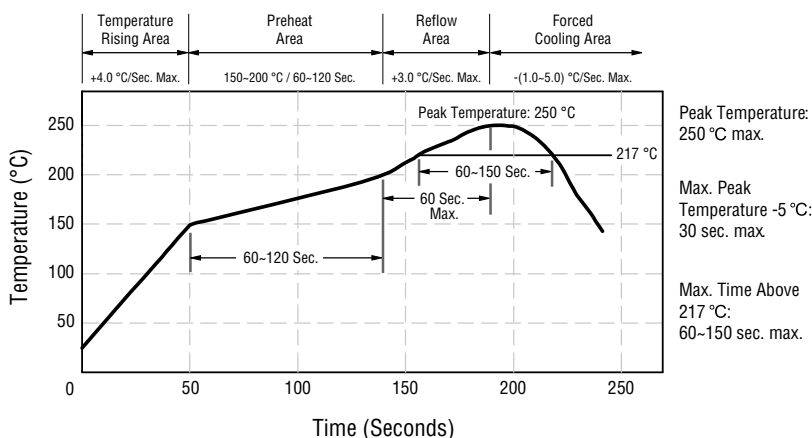
### Electrical Schematic



### Recommended Layout



### Soldering Profile



### Additional Information

Click these links for more information:



[PRODUCT SELECTOR](#) [TECHNICAL LIBRARY](#) [INVENTORY](#) [SAMPLES](#) [CONTACT](#)

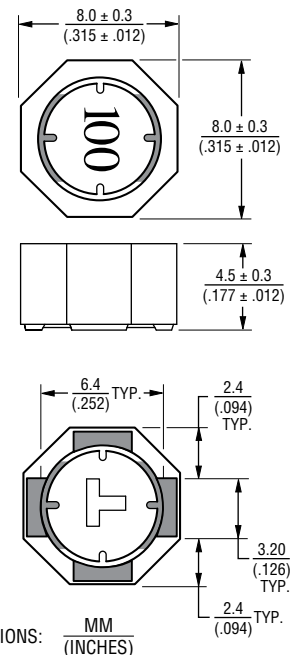
### General Specifications

Operating Temp. .... -40 °C to +125 °C  
(Temperature rise included)  
Storage Temperature ... -40 °C to +125 °C  
Temperature Rise .....40 °C at rated I rms  
Rated Current  
..... Inductance drops 35 % at I sat  
Failure In Time (FIT).....24.7/10<sup>9</sup> hours  
Mean Time Between Failures (MTBF)  
.....40.4 x 10<sup>6</sup> hours

### Materials

Core..... Ferrite  
Wire .....Enameled copper  
Terminal Finish ..... Sn  
Packaging..... 1000 pcs. per 13-inch reel

### Product Dimensions



\* 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. Specifications are subject to change without notice. Users should verify actual device performance in their specific applications. The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at [www.bourns.com/docs/legal/disclaimer.pdf](http://www.bourns.com/docs/legal/disclaimer.pdf).

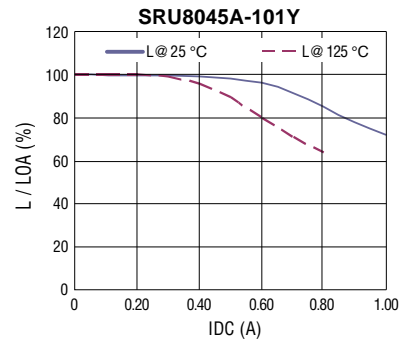
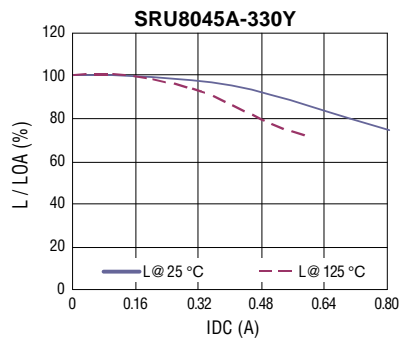
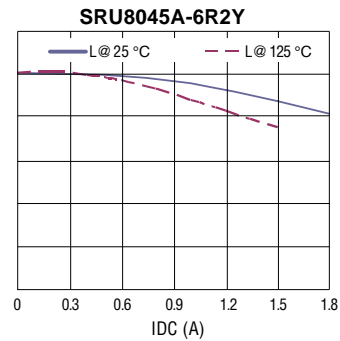
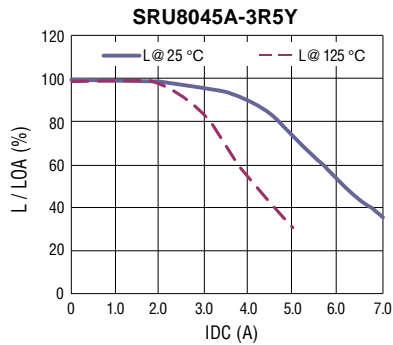


**WARNING**  
Cancer and Reproductive Harm  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

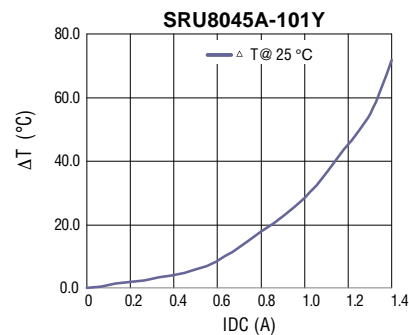
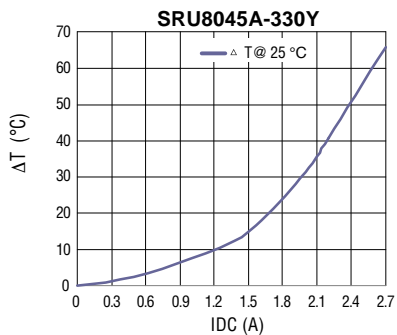
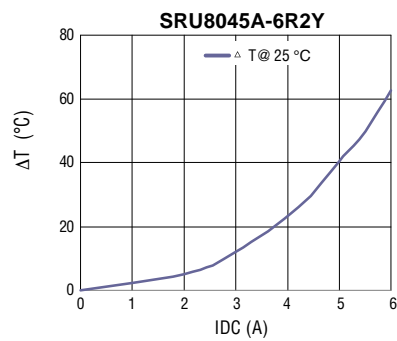
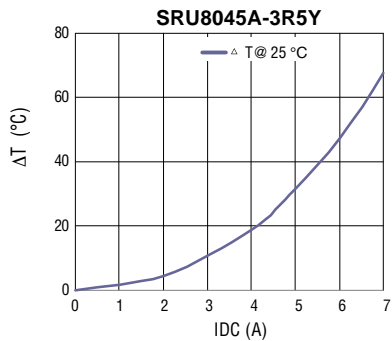
# SRU8045A Series - Shielded Power Inductors

**BOURNS®**

## Inductance vs. IDC



## Temperature vs. IDC



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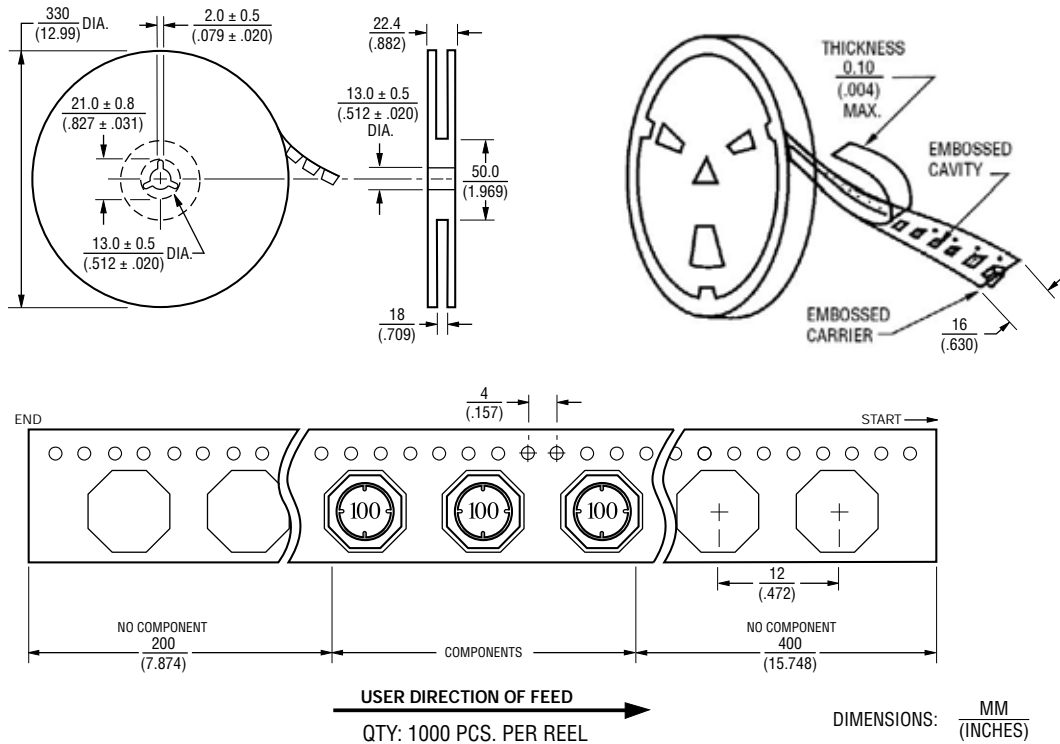
Users should verify actual device performance in their specific applications.

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# SRU8045A Series - Shielded Power Inductors

**BOURNS®**

## Packaging Specifications



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EMEA: Tel: +36 88 885 877 • Email: [eurocus@bourns.com](mailto:eurocus@bourns.com)

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