

#### **Features**

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

## **SRU8045A Series - Shielded Power Inductors**

#### Electrical Specifications @ 25 °C

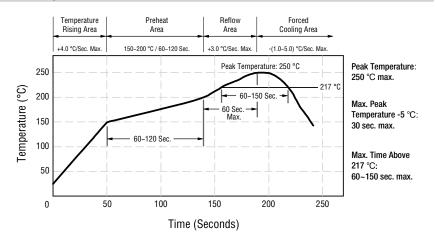
Bourns Part Number	Inductance @ 100 kHz/ 0.1 V		Q (Ref.)	Test Freq.	SRF (MHz)	DCR (Ω)		l rms	1 1
						Тур.	Max.	(A)	I sat (A)
	L (μH)	Tol. (%)		(MHz)	Тур.	., p.			
SRU8045A-3R5Y	3.5	± 30	12	7.96	45	0.0188	0.025	5.00	5.00
SRU8045A-4R7Y	4.7	± 30	10	7.96	30	0.022	0.0275	4.60	4.40
SRU8045A-6R2Y	6.2	± 30	10	7.96	23	0.0285	0.036	4.20	3.80
SRU8045A-100Y	10	± 30	16	2.52	18	0.035	0.048	3.50	3.30
SRU8045A-220Y	22	± 30	18	2.52	12	0.094	0.122	2.25	2.15
SRU8045A-330Y	33	± 30	14	2.52	8	0.118	0.15	2.00	1.80
SRU8045A-470Y	47	± 30	12	2.52	6	0.215	0.27	1.45	1.40
SRU8045A-680Y	68	± 30	8	2.52	4	0.32	0.40	1.25	1.20
SRU8045A-101Y	100	± 30	20	0.796	3	0.40	0.50	1.00	0.92

#### **Electrical Schematic**

#### How to Order



#### **Soldering Profile**



# **^**

#### WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

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

\*\*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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#### **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 Irms
Rated Current

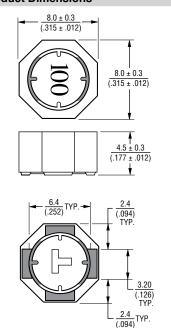
........... Inductance drops 35 % at Isat Failure In Time (FIT).......24.7/10 $^{\rm 9}$  hours Mean Time Between Failures (MTBF)

......40.4 x 10<sup>6</sup> hours

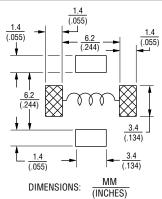
#### **Materials**

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

#### **Product Dimensions**



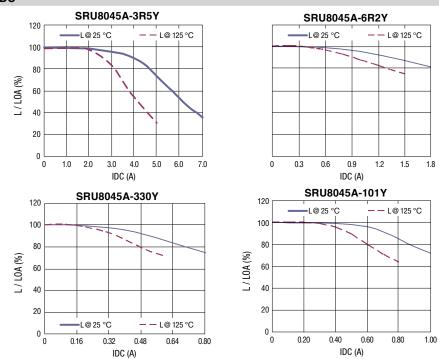
### **Recommended Layout**



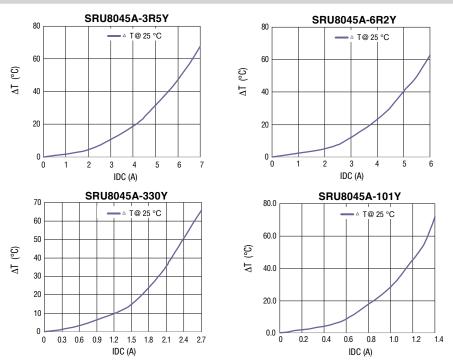
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## **BOURNS**

#### Inductance vs. IDC



#### Temperature vs. IDC



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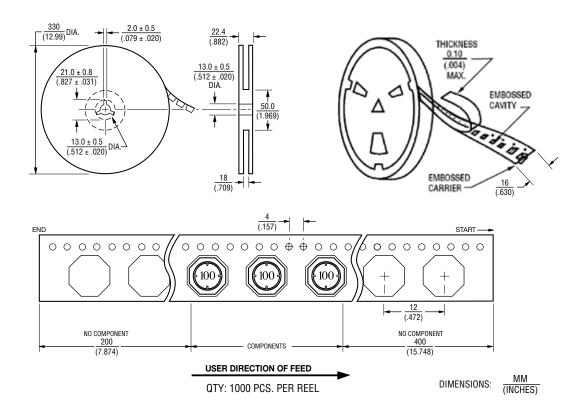
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## **SRU8045A Series - Shielded Power Inductors**

## **BOURNS**®

#### **Packaging Specifications**



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