

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

Baurna	Inductance @ 100 kHz / 0.1 V		Q (Ref.)	Test Freq.	SRF (MHz)	DCR (Ω)		Lrmo	Last
Bourns Part Number						Тур.	Max.	Irms (A)	I sat (A)
	L (µH)	Tol. (%)		(MHz)	Тур.	.,			
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

How to Order

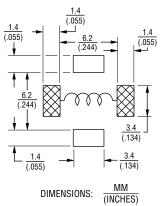
SRU8045A - 100Y Model Value Code (see table)

Electrical Schematic

Soldering Profile



Recommended Layout



Temperature Preheat Reflow Forced **Rising Area** Area Cooling Area Area +4.0 °C/Sec. Max 150~200 °C / 60~120 Sec +3.0 °C/Sec. Max. -(1.0~5.0) °C/Sec. Max Peak Temperature: 250 °C Peak Temperature: 250 250 °C max. Femperature (°C) 60~150 Sec 200 Max. Peak 60 Sec. Temperature -5 °C: Max 150 30 sec. max. 60~120 Sec 100 Max. Time Above 217 °C' 50 60~150 sec. max. 50 100 150 200 250 0 Time (Seconds)

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 (CI) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (CI) 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.

Additional Information

Click these links for more information:



General Specifications

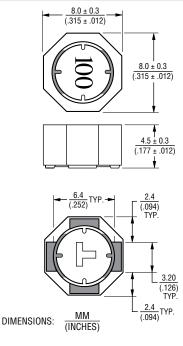
Operating Temp. -40 °C to +125 °C (Temperature rise included) Storage Temperature ... -40 °C to +125 °C Temperature Rise40 °C at rated Irms Rated Current

..... Inductance drops 35 % at Isat Failure In Time (FIT)24.7/109 hours Mean Time Between Failures (MTBF)40.4 x 10⁶ hours

Materials

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

Product Dimensions

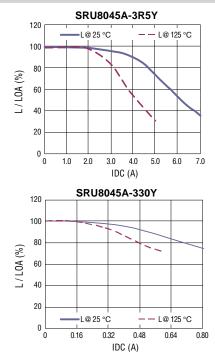


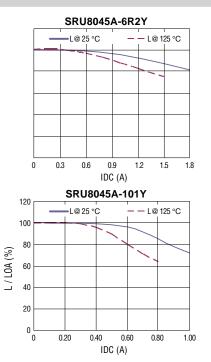


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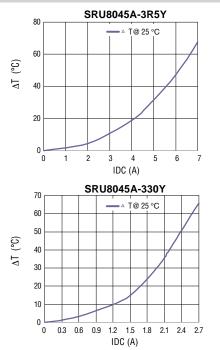
BOURNS

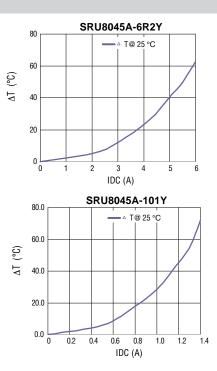
Inductance vs. IDC





Temperature vs. IDC





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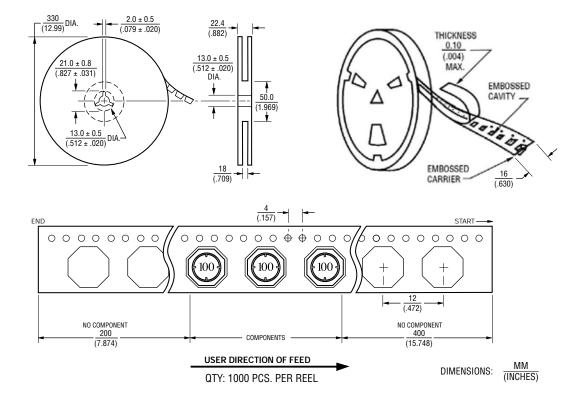
Users should verify actual device performance in their specific applications.

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Packaging Specifications



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