



**THE DATASHEET OF
SRU8045A-6R2Y**





Features

- Shielded construction
- Inductance range: 3.5 to 100 μ 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 (Ω)		I rms (A)	I sat (A)
	L (μ H)	Tol. (%)				Typ.	Max.		
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

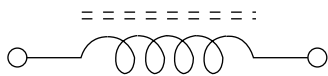
General Specifications

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) 24.7/10⁹ hours
 Mean Time Between Failures (MTBF)
 40.4 x 10⁶ hours

Materials

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

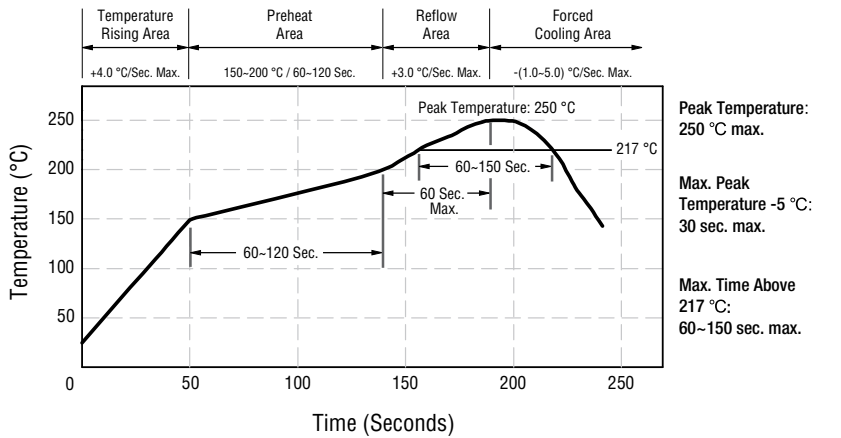
Electrical Schematic



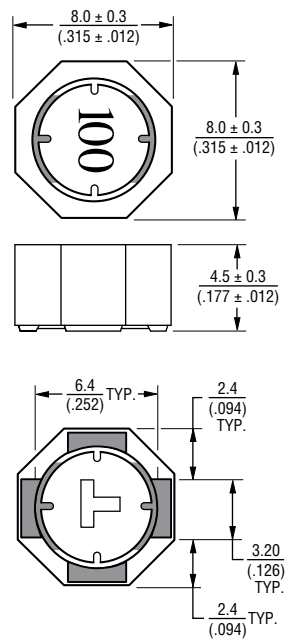
How to Order

SRU8045A - 100Y
 Model _____
 Value Code (see table) _____

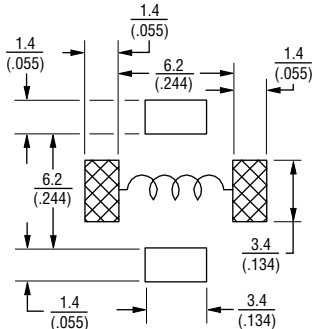
Soldering Profile



Product Dimensions



Recommended Layout



DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$



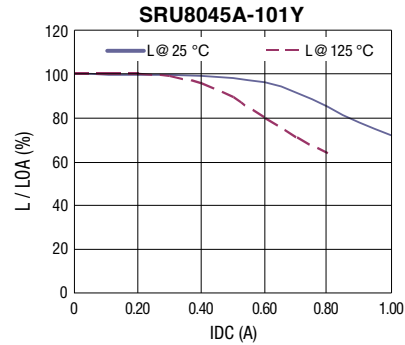
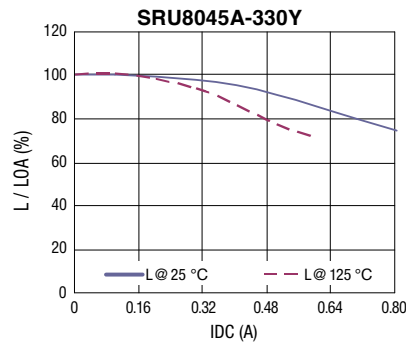
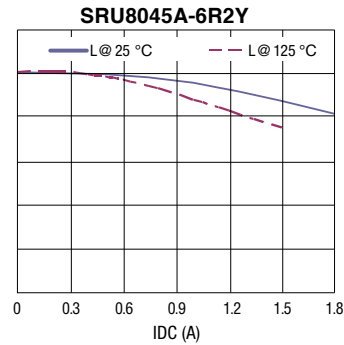
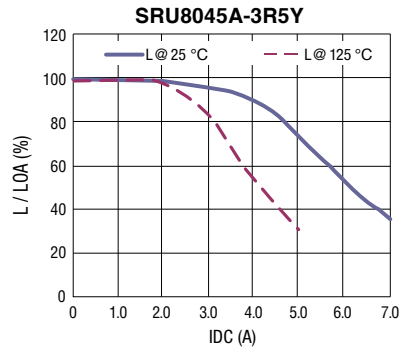
WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

* 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.
 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

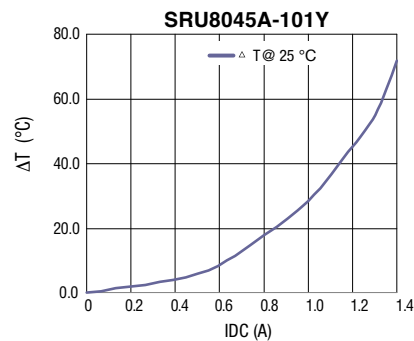
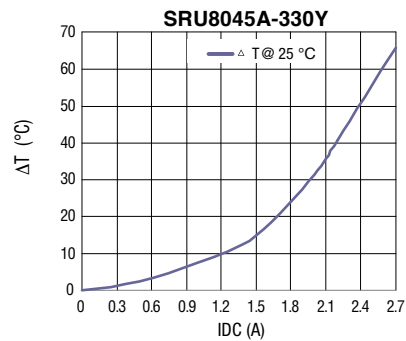
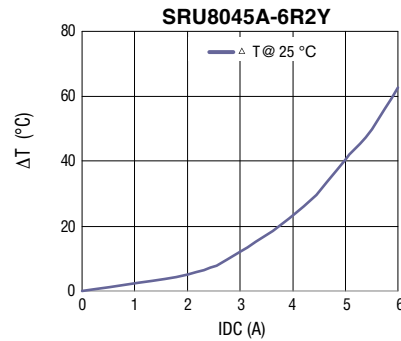
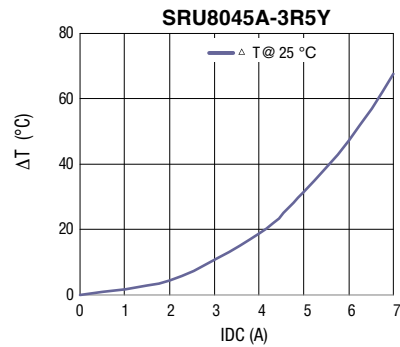
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Inductance vs. IDC



Temperature vs. IDC



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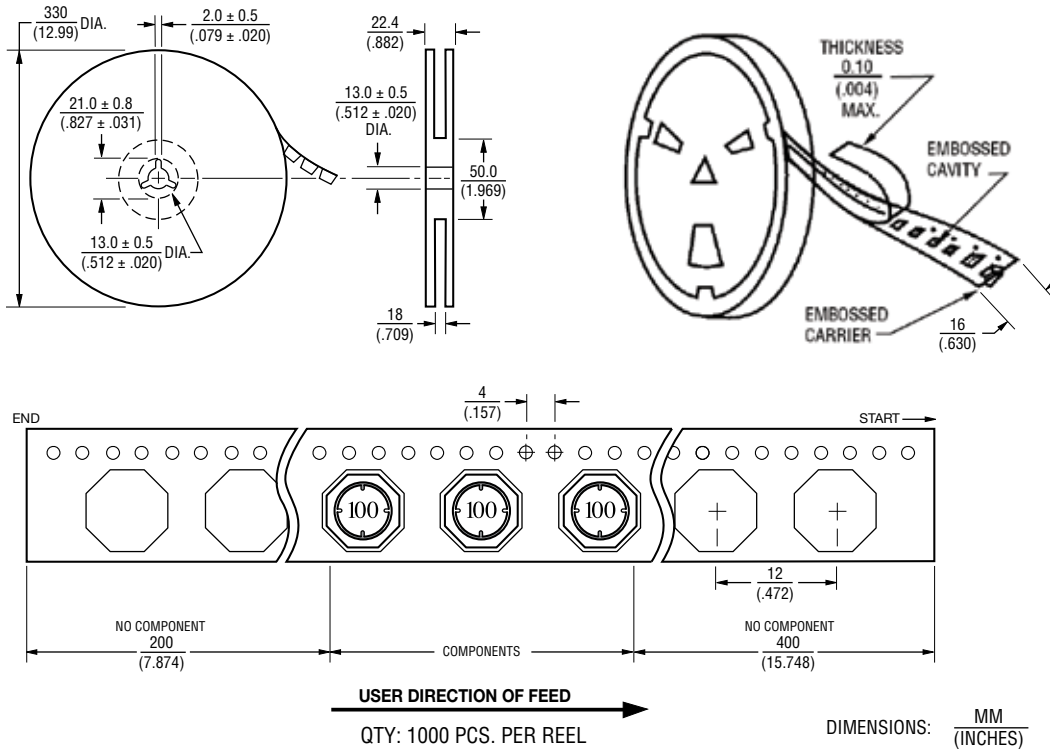
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SRU8045A Series - Shielded Power Inductors

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Packaging Specifications



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