



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**

Applications

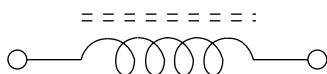
- Automotive systems:
 - Driver assistant
 - Infotainment
 - Lighting
- DC/DC converters
- Power supplies

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

Electrical Schematic

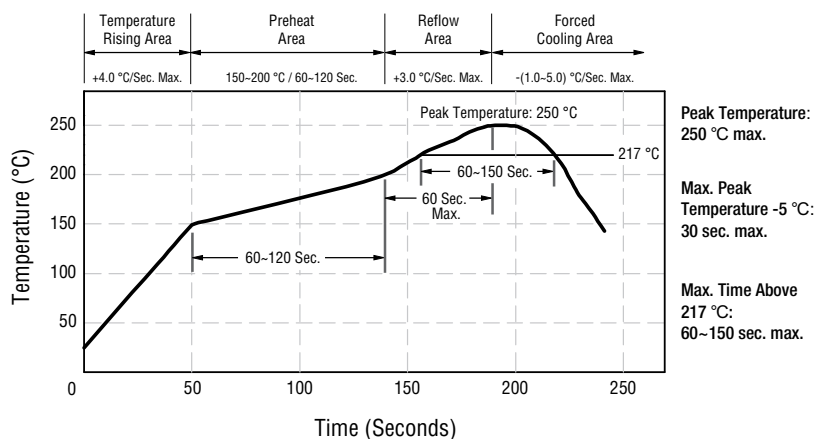


How to Order

SRU8045A - 100Y

Model _____
Value Code (see table) _____

Soldering Profile



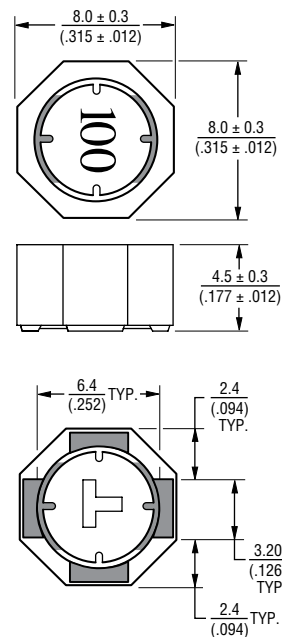
General Specifications

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

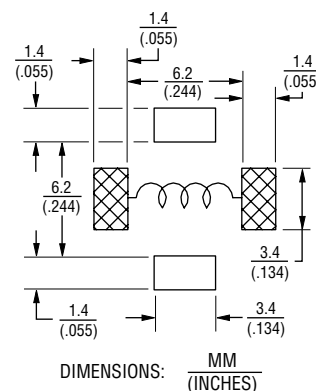
Materials

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

Product Dimensions



Recommended Layout



*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.

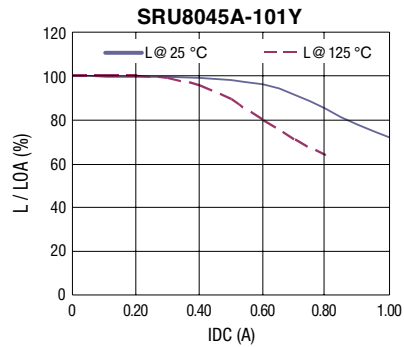
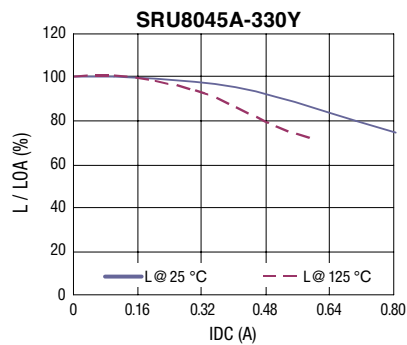
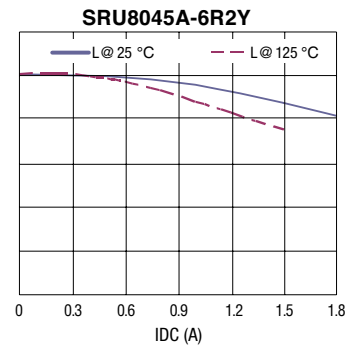
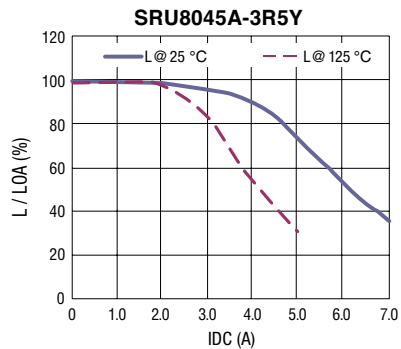
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.

Users should verify actual device performance in their specific applications.

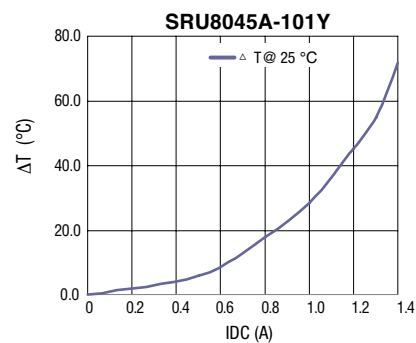
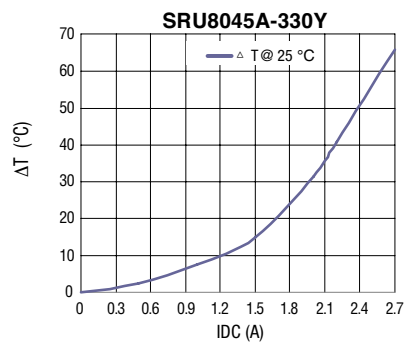
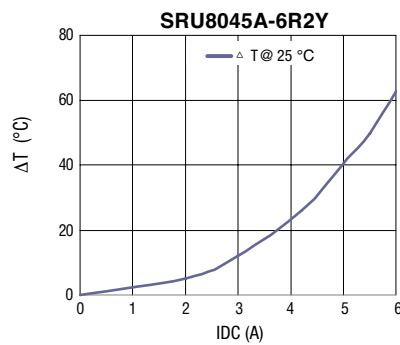
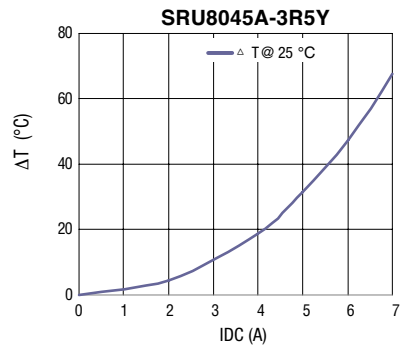
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Inductance vs. IDC



Temperature vs. IDC



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Packaging Specifications

