

### **Features**

- Shielded construction
- Inductance range: 2.5 to 100 µH
- Heating current up to 4.5 A
- AEC-Q200 qualified
- RoHS compliant\* and halogen free\*\*

# SRU8028A Series - Shielded Power Inductors

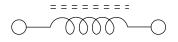
### Electrical Specifications @ 25 °C

Bourns Part Number	Inductance @ 100 KHz / 1 V		Q	Test Freq.	SRF (MHz)	DCR (Ω)	l rms	I sat
	L (μH)	Tol. (%)	(Ref.)	(MHz)	Typ.	Max.	(A)	(A)
SRU8028A-2R5Y	2.5	±30	15	7.96	65	0.018	4.5	4.2
SRU8028A-3R3Y	3.3	±30	12	7.96	60	0.023	3.6	3.5
SRU8028A-4R7Y	4.7	±30	15	7.96	50	0.026	3.7	3.2
SRU8028A-6R8Y	6.8	±30	13	7.96	40	0.045	2.8	2.5
SRU8028A-100Y	10	±30	22	2.52	35	0.057	2.6	2.2
SRU8028A-150Y	15	±30	20	2.52	25	0.085	2.0	1.7
SRU8028A-220Y	22	±30	22	2.52	20	0.13	1.6	1.5
SRU8028A-330Y	33	±30	20	2.52	15	0.185	1.3	1.1
SRU8028A-470Y	47	±30	14	2.52	12	0.23	1.2	1.0
SRU8028A-680Y	68	±30	23	2.52	9	0.39	0.85	0.8
SRU8028A-101Y	100	±30	20	0.796	8	0.50	0.75	0.7

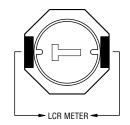
#### **How to Order**

SRU8028A - 100Y

### **Electrical Schematic**



### **Inductor Connection**



## **BOURNS**®

Asia-Pacific: Tel: +886-2 2562-4117 • Email: asiacus@bourns.com

EMEA: Tel: +36 88 885 877 • Email: eurocus@bourns.com

The Americas: Tel: +1-951 781-5500 • Email: americus@bourns.com

www.bourns.com



### WARNING Cancer and Reproductive Harm $\underline{www.P65Warnings.ca.gov}$

- \* 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 <a href="https://www.bourns.com/docs/legal/disclaimer.pdf">www.bourns.com/docs/legal/disclaimer.pdf</a>.

### **General Specifications**

Operating Temperature

.....-40 °C to +125 °C (Temperature rise included)

Storage Temperature

.....-40 °C to +125 °C

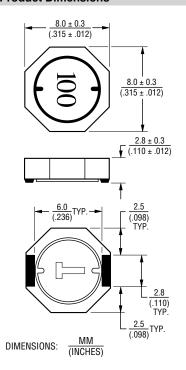
Temperature Rise

......40 °C typ. at rated I rms Inductance Drop ......35 % typ. at I sat

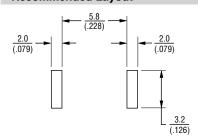
### Materials

Core	Ferrite
Wire	Enameled copper
Terminal Finish	Ag/Ni/Sn
Packaging	1500 pcs. per reel

#### **Product Dimensions**



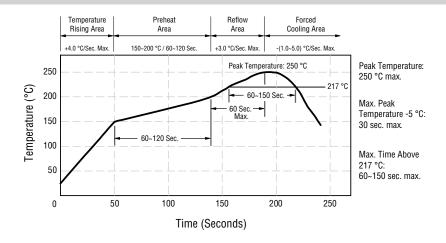
#### **Recommended Layout**



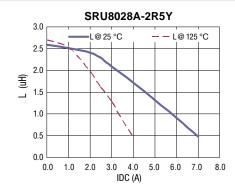
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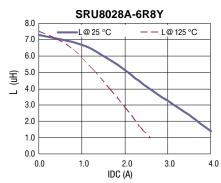
## BOURNS®

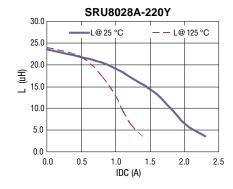
### **Soldering Profile**

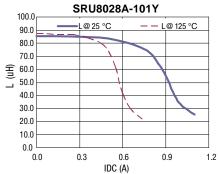


### L vs. IDC





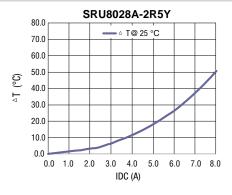


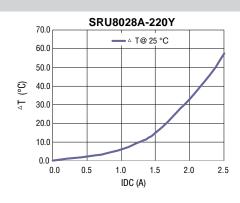


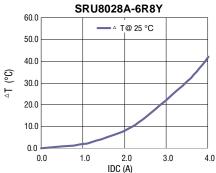
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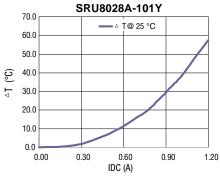
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### Temperature vs. IDC

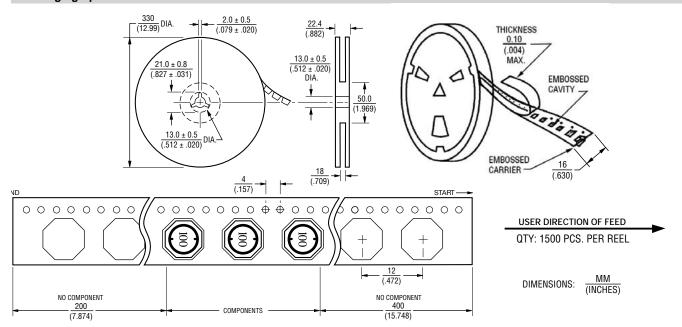








### **Packaging Specifications**



REV. 11/19

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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