



THE DATASHEET OF SRU1028A-2R2Y



Features

- Shielded construction
- Inductance range: 1 to 150 μ H
- Heating current up to 7 A
- AEC-Q200 qualified
- RoHS compliant* and halogen free**

SRU1028A Series - Shielded Power Inductors

Electrical Specifications @ 25 °C

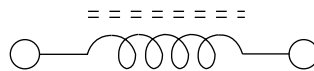
Bourns Part Number	Inductance @ 100 KHz / 1 V		Q (Ref.)	Test Freq. (MHz)	SRF (MHz) Typ.	DCR (m Ω) Max.	I rms (A)	I sat (A)
	L (μ H)	Tol. (%)						
SRU1028A-1R0Y	1.0	± 30	14	7.96	100	6.5	7.00	8.00
SRU1028A-1R5Y	1.5	± 30	12	7.96	80	10.0	6.50	6.50
SRU1028A-2R2Y	2.2	± 30	12	7.96	65	15.0	5.30	4.80
SRU1028A-3R3Y	3.3	± 30	14	7.96	55	20.0	4.60	4.30
SRU1028A-4R7Y	4.7	± 30	12	7.96	40	23.0	4.50	3.80
SRU1028A-6R8Y	6.8	± 30	12	7.96	30	33.0	3.50	3.00
SRU1028A-8R2Y	8.2	± 30	12	7.96	28	37.0	3.30	2.70
SRU1028A-100Y	10	± 30	20	2.52	25	53.0	2.80	2.40
SRU1028A-150Y	15	± 30	26	2.52	22	90.0	2.00	2.00
SRU1028A-220Y	22	± 30	26	2.52	16	135.0	1.60	1.40
SRU1028A-330Y	33	± 30	24	2.52	12	180.0	1.25	1.20
SRU1028A-470Y	47	± 30	20	2.52	11	230.0	1.30	1.10
SRU1028A-560Y	56	± 30	22	2.52	10	270.0	1.10	1.00
SRU1028A-680Y	68	± 30	20	2.52	9	300.0	1.00	0.90
SRU1028A-820Y	82	± 30	20	2.52	8	420.0	0.90	0.85
SRU1028A-101Y	100	± 30	20	0.796	7	470.0	0.85	0.80
SRU1028A-121Y	120	± 30	18	0.796	6	560.0	0.70	0.70
SRU1028A-151Y	150	± 30	18	0.796	5	680.0	0.65	0.65

How to Order

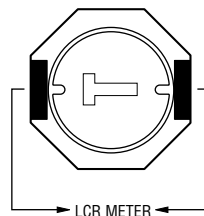
SRU1028A - 100Y

Model _____
Value Code (see table) _____

Electrical Schematic



Inductor Connection



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WARNING Cancer and Reproductive Harm 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.

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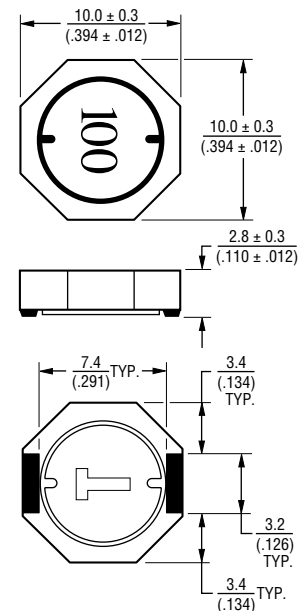
General Specifications

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

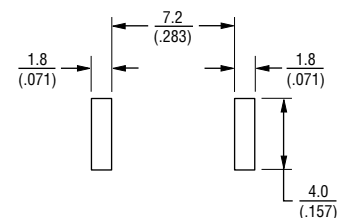
Materials

Core Ferrite
Wire Enameled copper
Terminal Finish Ag/Ni/Sn
Packaging 1000 pcs. per reel

Product Dimensions



Recommended Layout

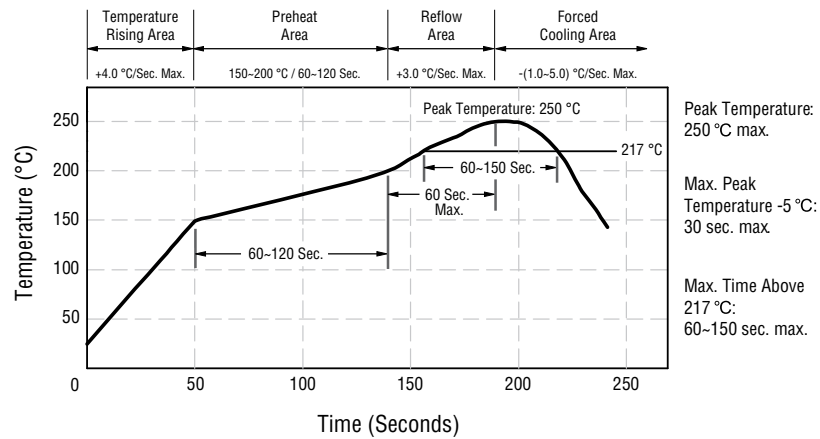


DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

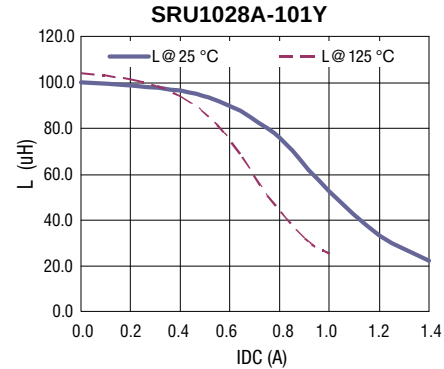
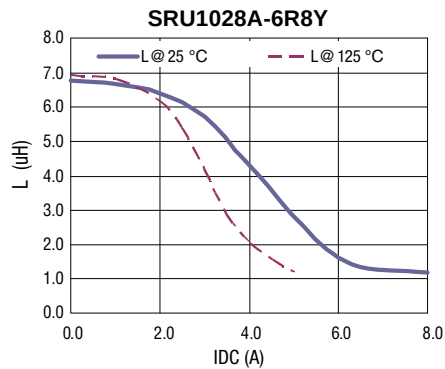
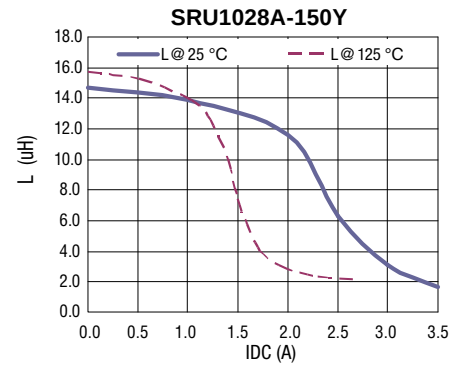
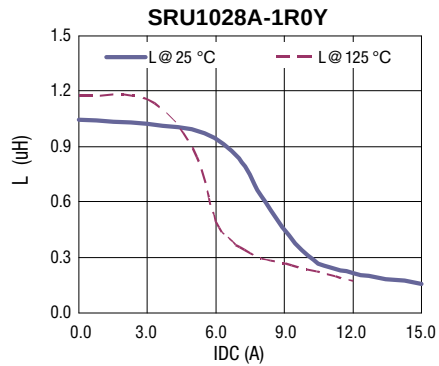
SRU1028A Series - Shielded Power Inductors

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Soldering Profile



L vs. IDC



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The figure consists of four sub-graphs, each representing a different SRU1028A model. All graphs show the junction temperature rise (ΔT) in degrees Celsius on the y-axis versus the input DC current (I_{DC}) in Amperes (A) on the x-axis. The temperature is maintained at 25 °C.

- SRU1028A-1R0Y:** The x-axis ranges from 0.0 to 15.0 A, and the y-axis ranges from 0.0 to 70.0 °C. The curve shows a non-linear increase in ΔT as I_{DC} increases.
- SRU1028A-150Y:** The x-axis ranges from 0.0 to 3.5 A, and the y-axis ranges from 0.0 to 60.0 °C. The curve shows a non-linear increase in ΔT as I_{DC} increases.
- SRU1028A-6R8Y:** The x-axis ranges from 0.0 to 8.0 A, and the y-axis ranges from 0.0 to 80.0 °C. The curve shows a non-linear increase in ΔT as I_{DC} increases.
- SRU1028A-101Y:** The x-axis ranges from 0.0 to 1.4 A, and the y-axis ranges from 0.0 to 70.0 °C. The curve shows a non-linear increase in ΔT as I_{DC} increases.

Top View Dimensions:

- Overall Diameter: 330 ± 0.5 (12.99) DIA.
- Inner Diameter: 2.0 ± 0.5 (0.079 ± .020)
- Central Feature Diameter: 21.0 ± 0.8 (.827 ± .031)
- Outer Ring Diameter: 13.0 ± 0.5 (.512 ± .020) DIA.

Side View Dimensions:

- Overall Width: 30.4 (1.20)
- Inner Width: 13.0 ± 0.5 (.512 ± .020) DIA.
- Height: $50 -0$ (1.969 -0)
- Bottom Flange Width: $26 +0$ (1.02 +0)

End View Dimensions:

- Thickness: 0.10 (.004) MAX.
- Embossed Cavity: 24 (.945)
- Embossed Carrier: 24 (.945)

End View Details:

- Overall Length: 4 (.157)
- Direction: END to START
- USER DIRECTION OF FEED
- QTY: 1000 PCS. PER REEL
- Dimensions: $\frac{MM}{(INCHES)}$

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