



Features

- Shielded construction
- Inductance range: 1.2 to 100 μ H
- Heating current up to 3.5 A
- AEC-Q200 qualified
- RoHS compliant* and halogen free**

Applications

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

SRU5028A Series - Shielded Power Inductors

Electrical Specifications @ 25 °C

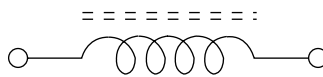
Bourns Part Number	Inductance @ 100 KHz / 0.1 V		Q (Ref.)	Test Freq. (MHz)	SRF (MHz) Typ.	DCR (Ω) Max.	I rms (A)	I sat (A)
	L (μ H)	Tol. (%)						
SRU5028A-1R2Y	1.2	± 30	10	7.96	200	0.022	3.5	3.4
SRU5028A-2R2Y	2.2	± 30	10	7.96	130	0.027	3.2	2.5
SRU5028A-3R3Y	3.3	± 30	10	7.96	90	0.032	2.8	2.1
SRU5028A-4R7Y	4.7	± 30	9	7.96	50	0.045	2.2	1.85
SRU5028A-6R8Y	6.8	± 30	10	7.96	45	0.056	2.0	1.55
SRU5028A-100Y	10	± 30	18	2.52	25	0.085	1.8	1.4
SRU5028A-150Y	15	± 30	18	2.52	23	0.14	1.1	1.0
SRU5028A-220Y	22	± 30	15	2.52	18	0.21	0.95	0.85
SRU5028A-330Y	33	± 30	15	2.52	16	0.26	0.8	0.68
SRU5028A-470Y	47	± 30	13	2.52	13	0.36	0.7	0.62
SRU5028A-680Y	68	± 30	13	2.52	10	0.55	0.56	0.46
SRU5028A-101Y	100	± 30	15	0.796	8	0.8	0.47	0.42

How to Order

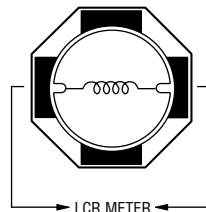
SRU5028A - 100Y

Model _____
Value Code (see table) _____

Electrical Schematic



Inductor Connection



General Specifications

Operating Temperature

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

Storage Temperature

.....-40 °C to +125 °C

Resistance to Soldering Heat

.....+250 °C for 10 sec.

Temperature Rise

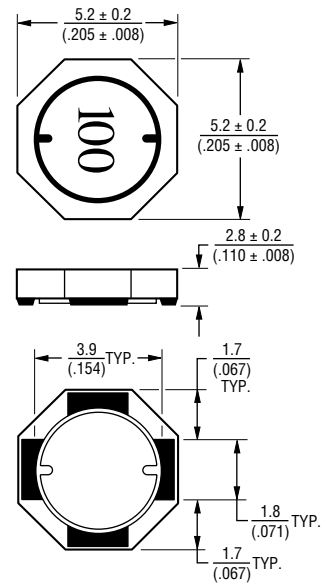
.....40 °C typ. at rated I rms

Inductance Drop35 % typ. at I sat

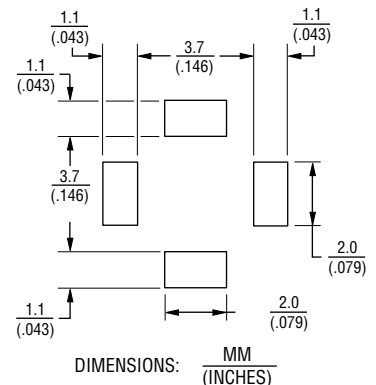
Materials

Core.....Ferrite
Wire.....Enameled copper
Terminal Finish.....Ag/Ni/Sn
Packaging.....600 pcs. per 7 " reel

Product Dimensions



Recommended Layout



BOURNS®

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* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

** Bourns follows the prevailing definition of "halogen free" in the industry. 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.

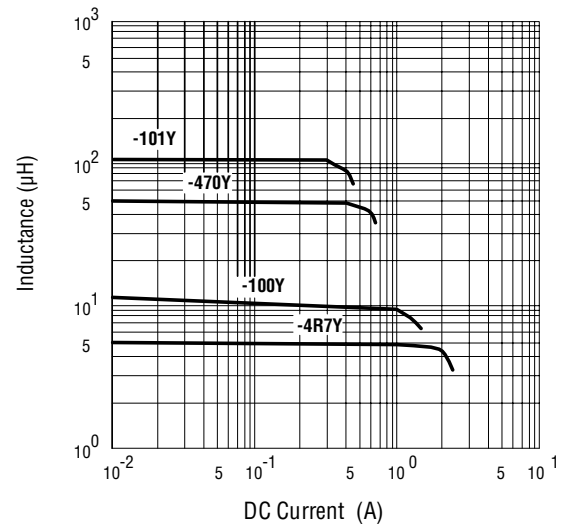
Specifications are subject to change without notice.

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. DC Current Plot



Technical drawing of a 100 ohm resistor showing end view, side view, and top view with dimensions in inches.

End View (Left):

- Overall diameter: 178 DIA. (7.008)
- Inner diameter: $2.0 \pm 0.5 \text{ (.079 } \pm .020)$
- Inner diameter (dashed line): $21.0 \pm 0.8 \text{ (.827 } \pm .031)$
- Inner diameter (solid line): 13.0 DIA. (.512)

Side View (Middle):

- Overall thickness: 16.5 (.650)
- Inner thickness: 13.0 (.512) DIA.
- Inner thickness (dashed line): 50 -0 (1.969 -0)
- Inner thickness (solid line): 14 +0 (.551 +0)
- Inner thickness (dashed line): 4 (.157)

Top View (Right):

- Thickness: 0.10 (.004) MAX.
- Embossed cavity: 12 (.472)
- Embossed carrier: 8 (.315)

Top View (Bottom):

- Overall length: 200 (7.874)
- Overall width: 400 (15.748)
- Overall width (dashed line): 8 (.315)
- Overall width (solid line): 12 (.472)
- Overall width (dashed line): 16.5 (.650)
- Overall width (solid line): 13.0 (.512) DIA.
- Overall width (dashed line): 50 -0 (1.969 -0)
- Overall width (solid line): 14 +0 (.551 +0)
- Overall width (dashed line): 4 (.157)

USER DIRECTION OF FEED

QTY: 600 PCS. PER REEL

DIMENSIONS: MM (INCHES)

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