

Features

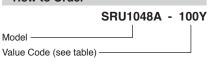
- Shielded construction
- Inductance range: 1.5 to 330 µH
- Heating current up to 7 A
- AEC-Q200 compliant
- RoHS compliant* and halogen free**

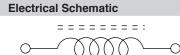
SRU1048A Series - Shielded Power Inductors

Electrical Specifications @ 25 °C

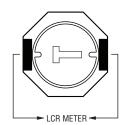
Bourns Part Number	Inductance @ 100 KHz / 1 V		Q	Test	SRF			l rms	l sat
	L (µH)	Tol. (%)	(Ref.)	Freq. (MHz)	(MHz) Typ.	(mΩ) Typ.	(mΩ) Max.	(A)	(A)
SRU1048A-1R5Y	1.5	±30	14	7.96	70	4.3	5.8	7.0	7.2
SRU1048A-2R2Y	2.2	±30	14	7.96	55	5.3	7.2	6.5	6.3
SRU1048A-3R0Y	3.0	±30	14	7.96	40	7.2	10.0	6.2	6.0
SRU1048A-4R7Y	4.7	±30	12	7.96	30	9.5	12.5	5.5	4.75
SRU1048A-6R8Y	6.8	±30	10	7.96	20	13.6	18.0	4.8	4.1
SRU1048A-8R2Y	8.2	±30	8	7.96	18	15.0	20.0	4.6	3.8
SRU1048A-100Y	10	±30	26	2.52	16	18.5	25.0	4.5	3.7
SRU1048A-150Y	15	±30	30	2.52	14	29.0	40.0	3.2	2.7
SRU1048A-220Y	22	±30	22	2.52	12	42.0	55.0	2.6	2.0
SRU1048A-330Y	33	±30	24	2.52	10	63.0	84.0	2.1	1.7
SRU1048A-470Y	47	±30	26	2.52	8	94.0	120.0	1.7	1.5
SRU1048A-560Y	56	±30	26	2.52	7	110.0	145.0	1.6	1.4
SRU1048A-680Y	68	±30	24	2.52	6	127.0	170.0	1.4	1.25
SRU1048A-820Y	82	±30	24	2.52	5.5	149.0	200.0	1.3	1.1
SRU1048A-101Y	100	±30	26	0.796	5	160.0	220.0	1.2	1.0
SRU1048A-151Y	150	±30	24	0.796	4.5	235.0	305.0	1.0	0.8
SRU1048A-221Y	220	±30	20	0.796	4	350.0	455.0	0.8	0.7
SRU1048A-331Y	330	±30	18	0.796	3	490.0	640.0	0.65	0.52

How to Order





Inductor Connection



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WARNING Cancer and Reproductive Harm - <u>www.P65Warnings.ca.gov</u>

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 (CI) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (CI) 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.

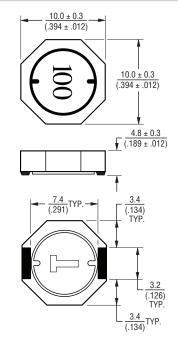
General Specifications

Operating Temperature
-40 °C to +125 °C
(Temperature rise included)
Storage Temperature
-40 °C to +125 °C
Resistance to Soldering Heat
+245 °C for 10 sec.
Temperature Rise
Inductance Drop 35 % typ. at I sat

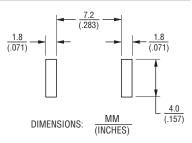
Materials

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

Product Dimensions

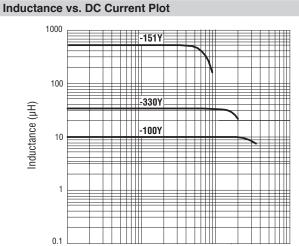


Recommended Layout



SRU1048A Series - Shielded Power Inductors

Soldering Profile Peak Temperature: 245 °C max. Max. Peak Temperature -5 °C: 30 sec. max. Max. Time Above 217 °C: 60~150 sec. max. Temperature Rising Area Preheat Area Reflow Forced Cooling Area Area +4.0 °C/Sec. Max. 150~200 °C / 60~120 Sec. +3.0 °C/Sec. Max. -(1.0~5.0) °C/Sec. Max. Peak Temperature: 245 °C 250 217 °C Temperature (°C) 200 60~150 Sec. . 60 Sec Max. 150 60~120 Sec 100 50 0 50 100 150 200 250 Time (Seconds)



0.1

DC Current (A)

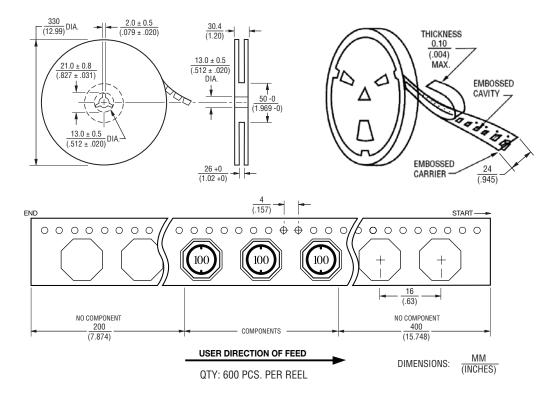
0.01

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Packaging Specifications



REV. 10/20

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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