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 (Ref.)	Test Freq. (MHz)	SRF (MHz) Typ.	DCR (mΩ) Typ.	DCR (mΩ) Max.	I rms (A)	I sat (A)
	L (µH)	Tol. (%)							
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

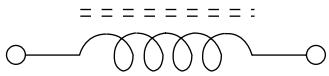
How to Order

SRU1048A - 100Y

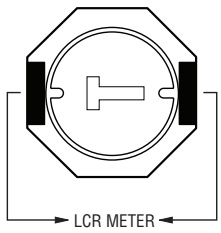
Model

Value Code (see table)

Electrical Schematic



Inductor Connection



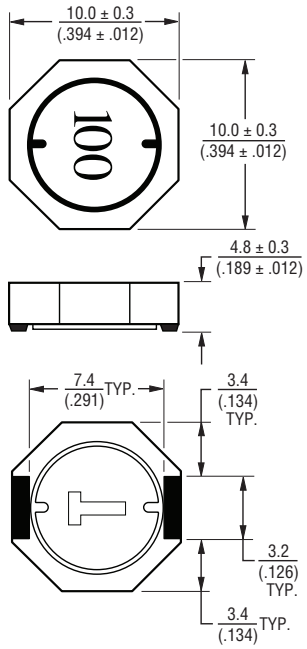
General Specifications

Operating Temperature .....-40 °C to +125 °C
(Temperature rise included)
Storage Temperature .....-40 °C to +125 °C
Resistance to Soldering Heat .....+245 °C for 10 sec.
Temperature Rise .....30 °C typ. at rated I rms
Inductance Drop .....35 % typ. at I sat

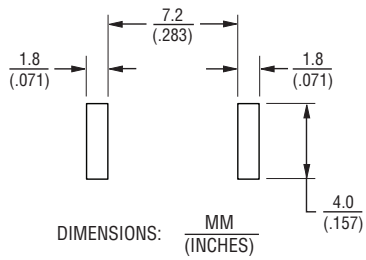
Materials

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

Product Dimensions



Recommended Layout



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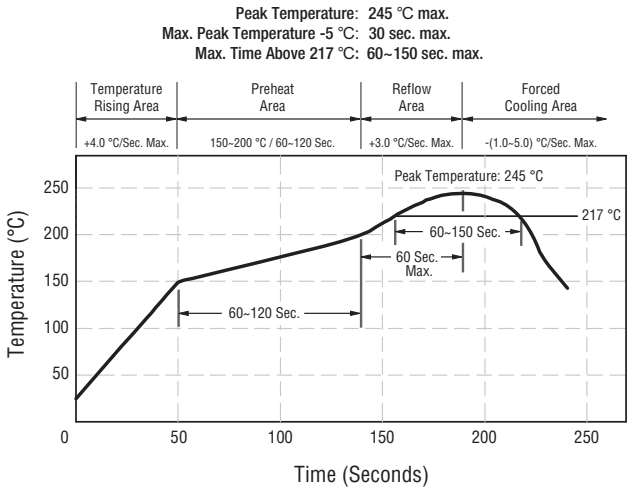
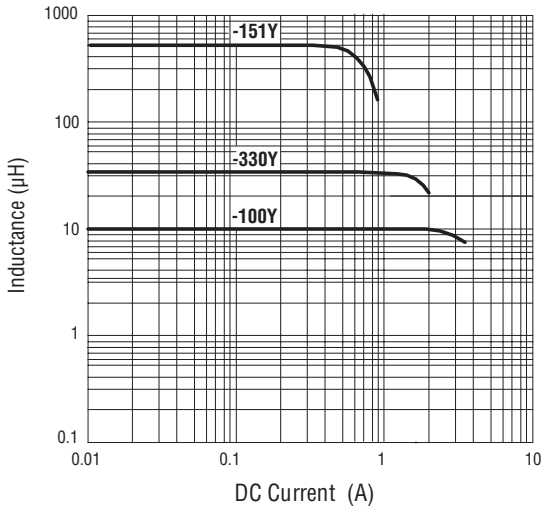
WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

* 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.

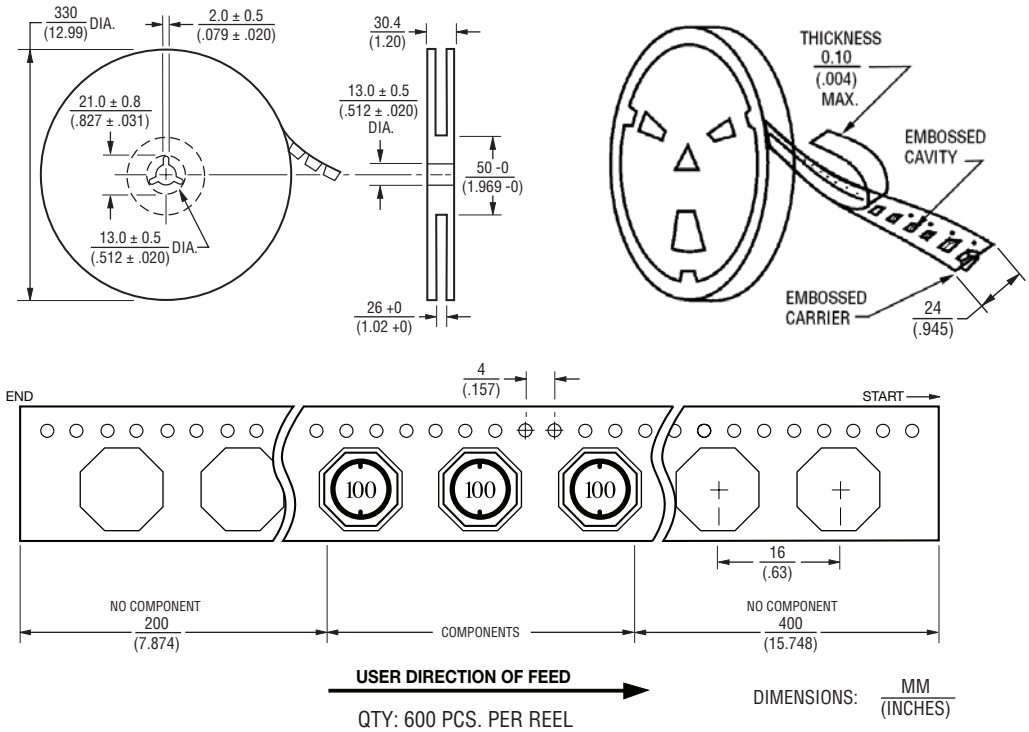
Soldering Profile



Inductance vs. DC Current Plot



Packaging Specifications



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