



THE DATASHEET OF SRU1048-101Y



Features

- Available in E6 series
- Unit height of 4.8 mm
- Current up to 7.8 A
- RoHS compliant*

Applications

- Input/output of DC/DC converters
- Power supplies for:
 - Portable communication equipment
 - Camcorders
 - LCD TVs

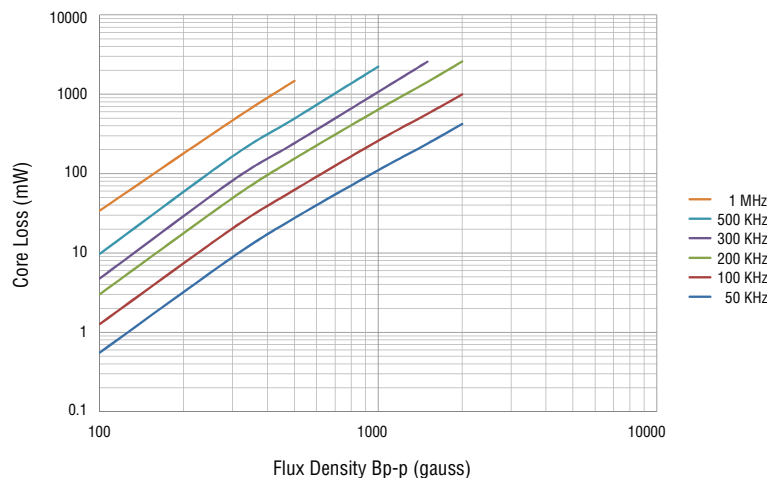
SRU1048 Series - Shielded SMD Power Inductors

Electrical Specifications

Bourns Part Number	Inductance @ 100 KHz		Q (Ref.)	Test Freq. (MHz)	SRF Typ. (MHz)	RDC		I rms Max. (A)	I sat Typ. (A)	**K- Factor
	L (μH)	Tol. (%)				Typ. (mΩ)	Max. (mΩ)			
SRU1048-R80Y	0.8	±30	8	7.96	100.0	3.6	4.8	7.80	8.50	266
SRU1048-1R5Y	1.5	±30	14	7.96	70.0	4.3	5.8	7.00	7.20	207
SRU1048-2R2Y	2.2	±30	14	7.96	55.0	5.3	7.2	6.50	6.30	169
SRU1048-3R0Y	3.0	±30	14	7.96	40.0	7.2	10.0	6.20	6.00	143
SRU1048-4R7Y	4.7	±30	12	7.96	30.0	9.5	12.5	5.50	4.75	124
SRU1048-6R8Y	6.8	±30	10	7.96	20.0	13.6	18.0	4.80	4.10	98
SRU1048-8R2Y	8.2	±30	8	7.96	18.0	15.0	20.0	4.60	3.80	89
SRU1048-100Y	10.0	±30	26	7.96	16.0	18.5	25.0	4.50	3.70	89
SRU1048-120Y	12.0	±30	26	2.52	15.0	25.0	35.0	4.00	3.30	81
SRU1048-150Y	15.0	±30	30	2.52	14.0	29.0	40.0	3.20	2.70	69
SRU1048-220Y	22.0	±30	22	2.52	12.0	42.0	55.0	2.60	2.00	56
SRU1048-330Y	33.0	±30	24	2.52	10.0	63.0	84.0	2.10	1.70	48
SRU1048-470Y	47.0	±30	26	2.52	8.0	94.0	120.0	1.70	1.50	41
SRU1048-560Y	56.0	±30	26	2.52	7.0	110.0	145.0	1.60	1.40	34
SRU1048-680Y	68.0	±30	24	2.52	6.0	127.0	170.0	1.40	1.25	33
SRU1048-820Y	82.0	±30	24	2.52	5.5	149.0	200.0	1.30	1.10	30
SRU1048-101Y	100.0	±30	26	0.796	5.0	160.0	220.0	1.20	1.00	26
SRU1048-151Y	150.0	±30	24	0.796	4.5	235.0	305.0	1.00	0.80	21
SRU1048-221Y	220.0	±30	20	0.796	4.0	350.0	455.0	0.80	0.70	17
SRU1048-331Y	330.0	±30	18	0.796	3.0	490.0	640.0	0.65	0.52	15
SRU1048-561Y	560.0	±30	24	0.796	1.9	890.0	1237.0	0.47	0.37	12

**K-Factor: To calculate core flux density, Bp-p (gauss) = $K \times L(\mu H) \times \Delta I$ (peak-to-peak ripple current, A), determine core loss from *Core Loss vs. Flux Density* plot.

Core Loss vs. Flux Density



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

*RoHS Directive 2015/863, Mar 31, 2015 and Annex.
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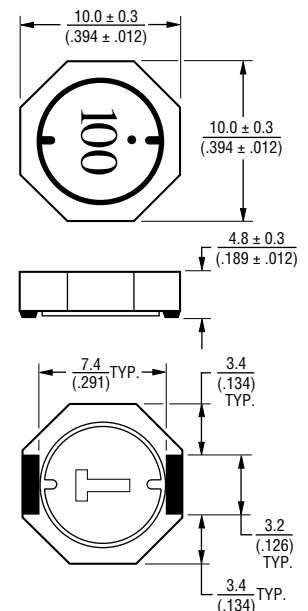
General Specifications

Test Voltage 1 V
Reflow Soldering .. 230 °C, 50 sec. max.
Operating Temperature
..... -40 °C to +125 °C
(Temperature rise included)
Storage Temperature .. -40 °C to +125 °C
Resistance to Soldering Heat
..... +260 °C for 10 sec.
Moisture Sensitivity Level 1
ESD Classification (HBM) N/A

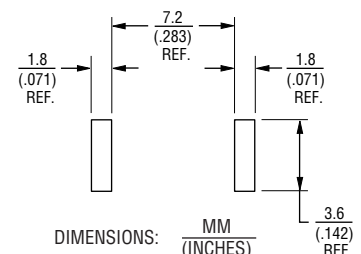
Materials

Core Ferrite DR and RI core
Wire Enamelled copper
Terminal Ag/Ni/Sn
Rated Current
..... Ind. drop 35 % typ. at Isat
Temperature Rise
..... 30 °C max. at rated Irms
Packaging 600 pcs. per reel

Product Dimensions



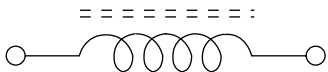
Recommended Layout



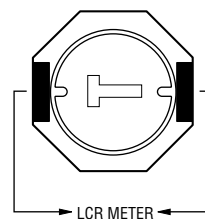
SRU1048 Series - Shielded SMD Power Inductors

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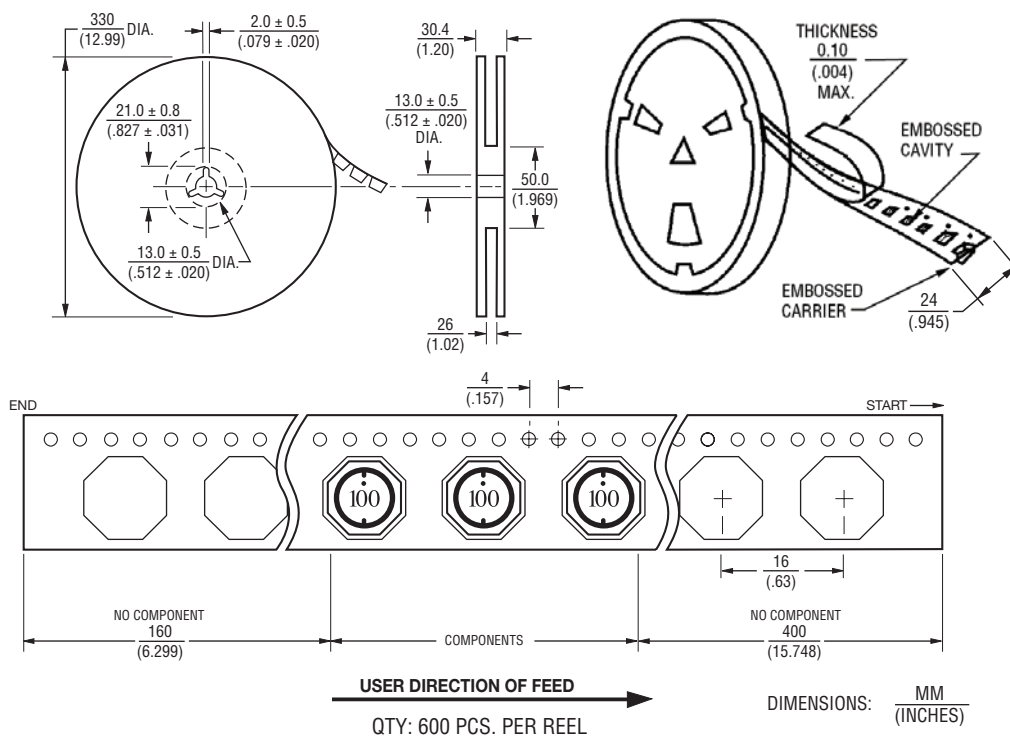
Electrical Schematic



Inductor Connection



Packaging Specifications



REV. 10/20

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