



**THE DATASHEET OF
SRU6013-680Y**





Features

- Maximum height of 1.60 mm
- Current up to 3.2 A
- RoHS compliant*

Applications

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

SRU6013 Series - Shielded SMD Power Inductors

Electrical Specifications

Bourns Part Number	Inductance @ 100 KHz		Q Ref.	Test Freq. (MHz)	SRF Typ. (MHz)	RDC Max. (mΩ)	I rms Max. (A)	I sat Typ. (A)	**K-Factor
	L (μH)	Tol. (%)							
SRU6013-1R0Y	1.0	±30	12	7.96	100	36	3.20	2.90	453
SRU6013-1R5Y	1.5	±30	10	7.96	90	40	3.00	2.40	370
SRU6013-2R2Y	2.2	±30	10	7.96	80	50	2.50	2.10	313
SRU6013-3R3Y	3.3	±30	10	7.96	70	60	2.35	1.75	272
SRU6013-4R2Y	4.2	±30	10	7.96	55	75	2.10	1.50	214
SRU6013-6R4Y	6.4	±30	10	7.96	45	110	1.70	1.30	177
SRU6013-100Y	10	±30	14	2.52	35	165	1.40	1.00	151
SRU6013-150Y	15	±30	12	2.52	26	235	1.10	0.80	116
SRU6013-220Y	22	±30	12	2.52	22	325	0.95	0.72	99
SRU6013-330Y	33	±30	10	2.52	18	500	0.78	0.58	77
SRU6013-470Y	47	±30	10	2.52	14	675	0.66	0.50	65
SRU6013-680Y	68	±30	10	2.52	10	900	0.60	0.40	57

**K-Factor: To calculate core flux density, B_p-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.

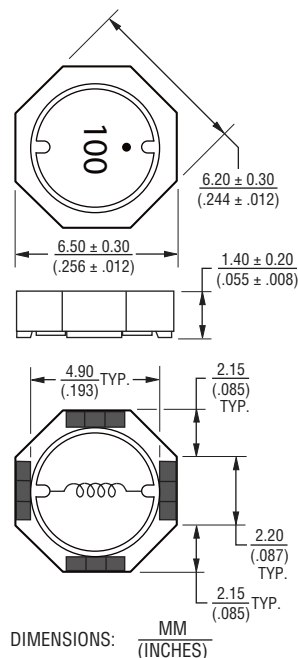
General Specifications

Test Voltage 0.1 V
 Reflow Soldering .. 230 °C, 50 sec. max.
 Operating Temp. -40 °C to +125 °C
 (Temperature rise included)
 Storage Temp. -40 °C to +125 °C
 Resistance to Soldering Heat
 260 °C for 10 sec.
 Moisture Sensitivity Level 1
 ESD Classification (HBM) N/A

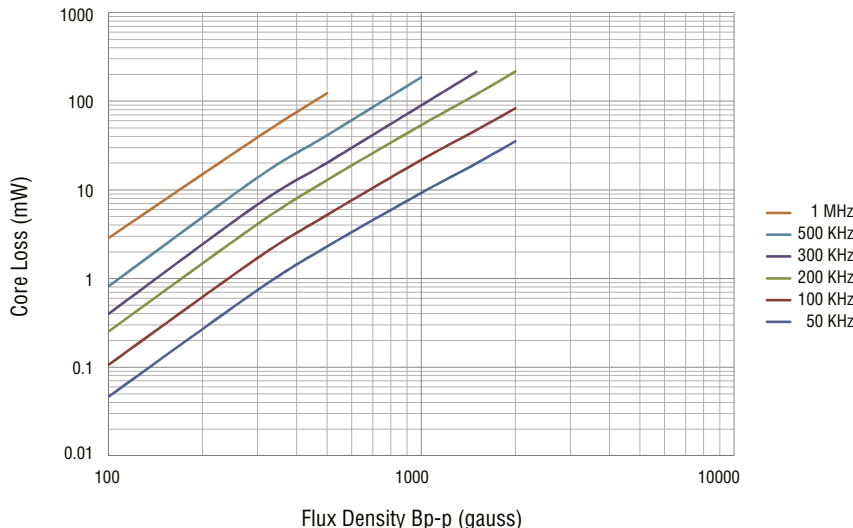
Materials

Core Ferrite DR and RI core
 Wire Enamelled copper
 Terminal Ag/Ni/Sn
 Rated Current.. Ind. drop 35 % typ. at Isat
 Temp. Rise 40 °C max. at rated Irms
 Packaging 1000 pcs. per reel

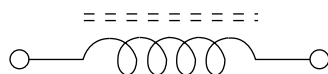
Product Dimensions



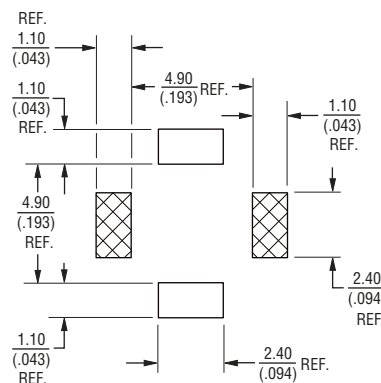
Core Loss vs. Flux Density



Electrical Schematic



Recommended Layout



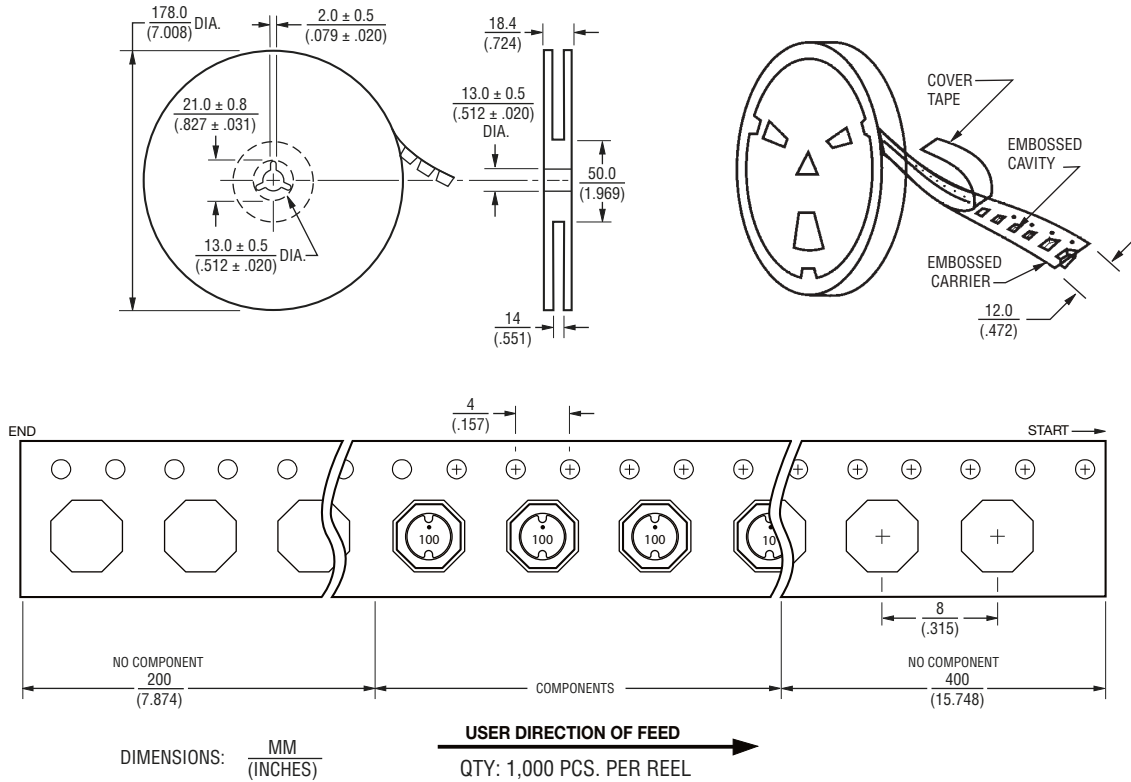
WARNING Cancer and Reproductive Harm
www.P65Warnings.ca.gov

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

SRU6013 Series - Shielded SMD Power Inductors

BOURNS®

Packaging Specifications



REV. 03/18

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