



**THE DATASHEET OF
SRU2016-680Y**





Features

- Maximum height of 1.8 mm
- Current up to 2.2 A
- RoHS compliant*

Applications

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

SRU2016 Series - Shielded SMD Power Inductors

Electrical Specifications

Bourns Part No.	Inductance 100 KHz		Q Ref.	Test Freq. (MHz)	SRF Typ. (MHz)	RDC Max. (mΩ)	Irms Max. (A)	Isat Typ. (A)	Marking	**K-Factor
	(μH)	Tol. %								
SRU2016-1R0Y	1.0	±30	8	7.96	250	60	2.20	1.60	A	2170
SRU2016-2R2Y	2.2	±30	8	7.96	120	105	1.60	1.00	C	1485
SRU2016-3R0Y	3.0	±30	8	7.96	90	135	1.50	0.87	E	1227
SRU2016-4R7Y	4.7	±30	8	7.96	80	215	1.15	0.74	F	973
SRU2016-6R0Y	6.0	±30	9	7.96	70	250	0.90	0.63	G	855
SRU2016-100Y	10	±30	9	2.52	45	430	0.87	0.52	H	627
SRU2016-150Y	15	±30	10	2.52	40	650	0.60	0.40	I	514
SRU2016-220Y	22	±30	12	2.52	30	990	0.43	0.37	J	448
SRU2016-330Y	33	±30	12	2.52	20	1470	0.41	0.29	K	376
SRU2016-470Y	47	±30	15	2.52	20	1650	0.31	0.22	L	303
SRU2016-680Y	68	±30	18	2.52	15	3510	0.22	0.17	M	233
SRU2016-101Y	100	±30	8	2.52	10	4900	0.19	0.15	N	209

**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.

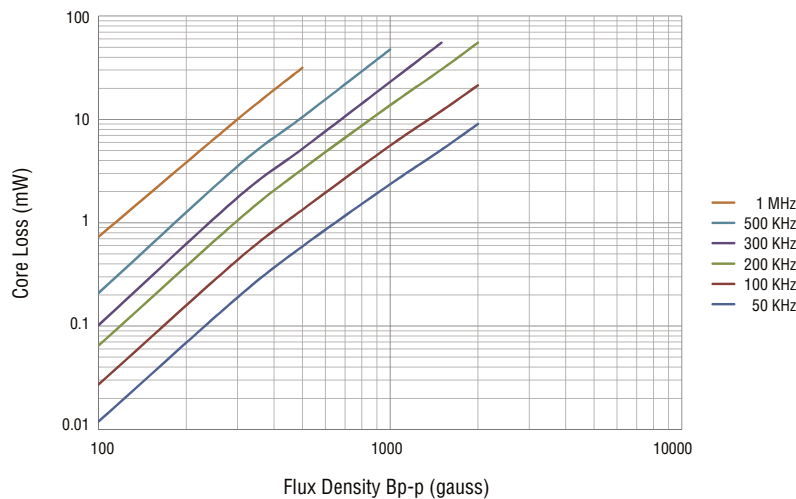
General Specifications

Test Voltage 0.1 V
 Reflow Soldering .. 230 °C, 50 sec. max.
 Operating 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

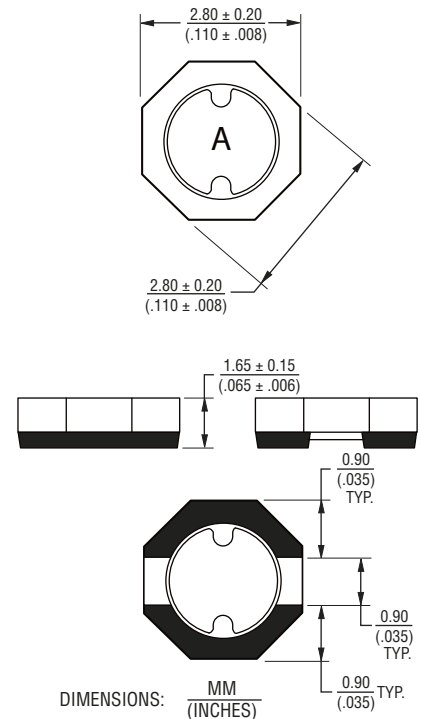
Materials

Core Ferrite DR and RI core
 Wire Enameled copper
 Terminal Ag/Ni/Sn
 Rated Current Ind. drop 35 % typ. at Isat
 Temperature Rise 40 °C max. at rated Irms
 Packaging 1,000 pcs. per reel

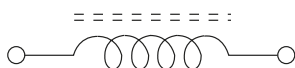
Core Loss vs. Flux Density



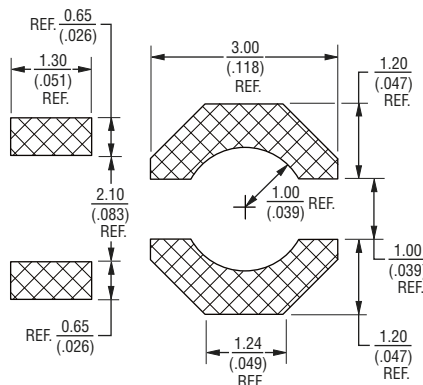
Product Dimensions



Electrical Schematic



Recommended Layout



* 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

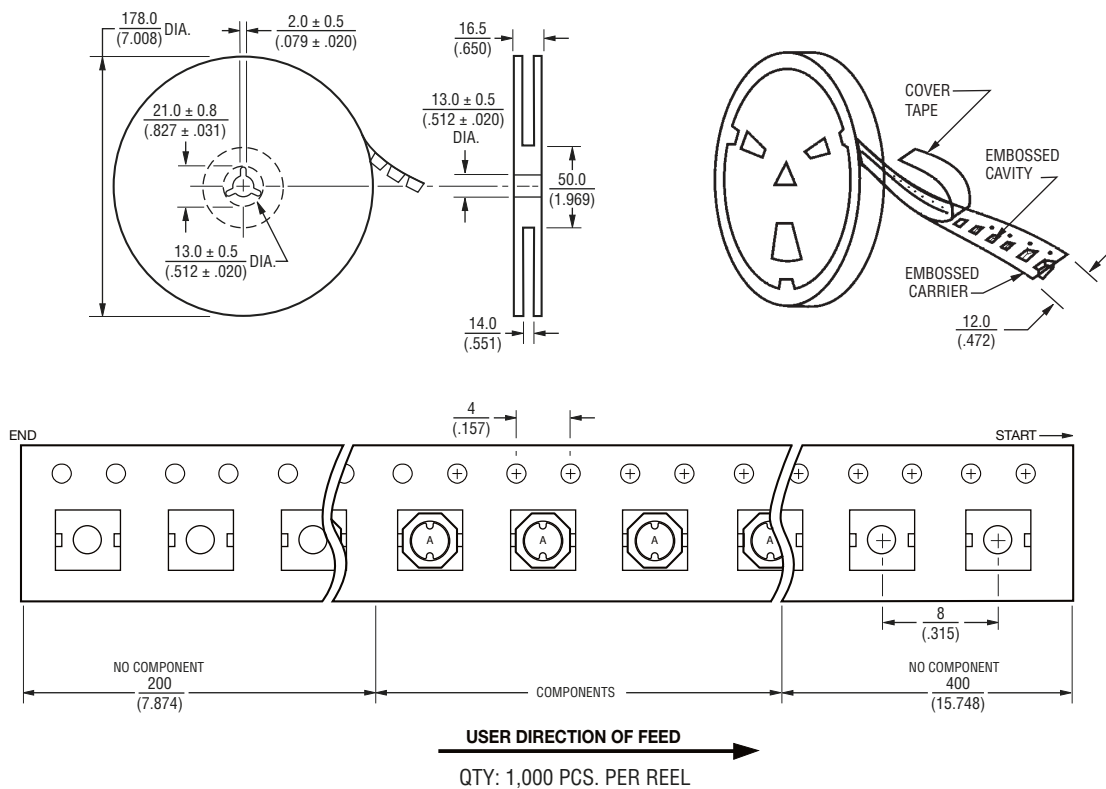


WARNING Cancer and Reproductive Harm
www.P65Warnings.ca.gov

SRU2016 Series - Shielded SMD Power Inductors

BOURNS®

Packaging Specifications



DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

REV. 03/18

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Users should verify actual device performance in their specific applications.

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