



**THE DATASHEET OF
SRU5016-1R8Y**





Features

- Available in E6 series
- Unit height of 1.6 mm
- Current up to 1.8 A
- RoHS compliant*

Applications

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

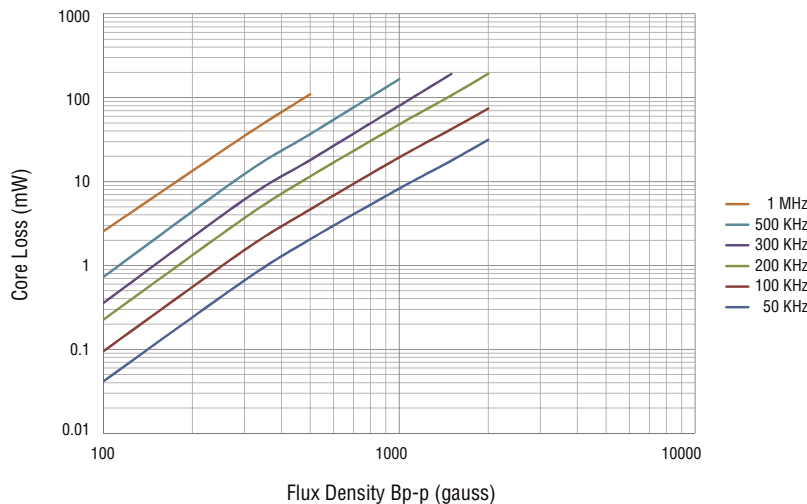
SRU5016 Series - Shielded SMD Power Inductors

Electrical Specifications

Bourns Part Number	Inductance @ 100 KHz		Q Ref.	Test Freq. (MHz)	SRF Min. (MHz)	RDC (.mΩ)	I rms Max. (A)	I sat Typ. (A)	**K-Factor
	L (μH)	Tol. (%)							
SRU5016-1R8Y	1.8	±30	9	7.96	100	24	1.75	1.70	605
SRU5016-3R3Y	3.3	±30	9	7.96	80	35	1.55	1.50	462
SRU5016-4R7Y	4.7	±30	9	7.96	60	43	1.30	1.20	374
SRU5016-6R8Y	6.8	±30	8	7.96	50	50	1.20	1.10	314
SRU5016-100Y	10.0	±30	15	2.52	40	84	1.00	0.90	271
SRU5016-150Y	15.0	±30	15	2.52	32	130	0.80	0.72	225
SRU5016-220Y	22.0	±30	15	2.52	28	195	0.65	0.56	192
SRU5016-330Y	33.0	±30	13	2.52	22	300	0.54	0.50	148
SRU5016-470Y	47.0	±30	18	2.52	18	390	0.46	0.42	125
SRU5016-680Y	68.0	±30	18	2.52	15	560	0.36	0.33	108
SRU5016-101Y	100.0	±30	18	0.796	12	850	0.30	0.27	83

**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.

Core Loss vs. Flux Density



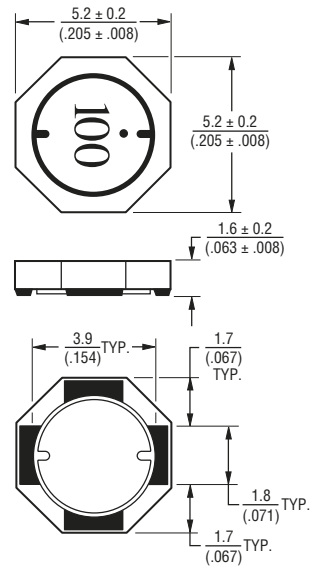
General Specifications

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

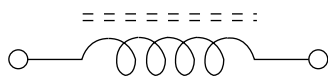
Materials

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

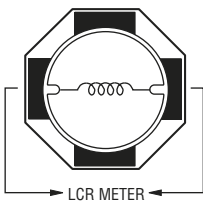
Product Dimensions



Electrical Schematic



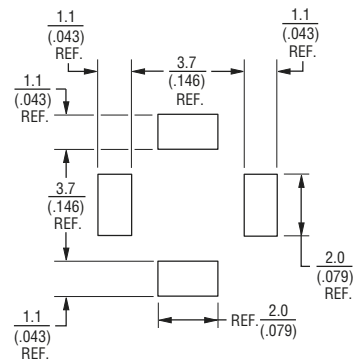
Inductor Connection



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

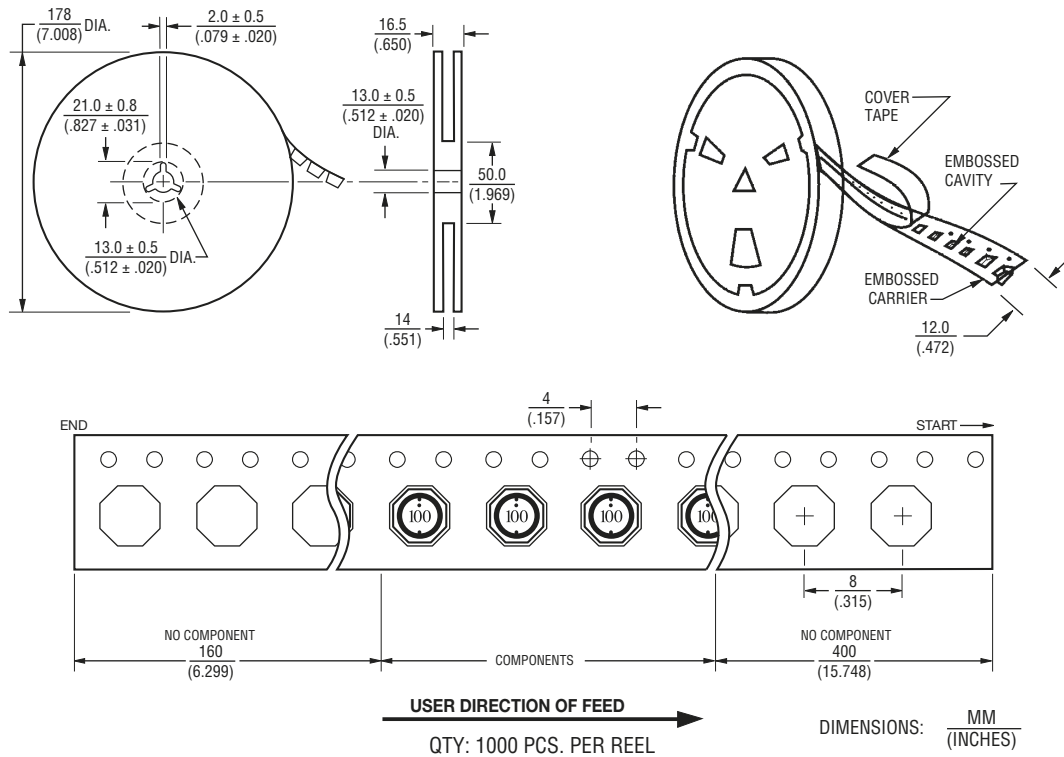
Recommended Layout



SRU5016 Series - Shielded SMD Power Inductors

BOURNS®

Packaging Specifications



REV. 03/18

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