



**THE DATASHEET OF
SRU5016-6R8Y**





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

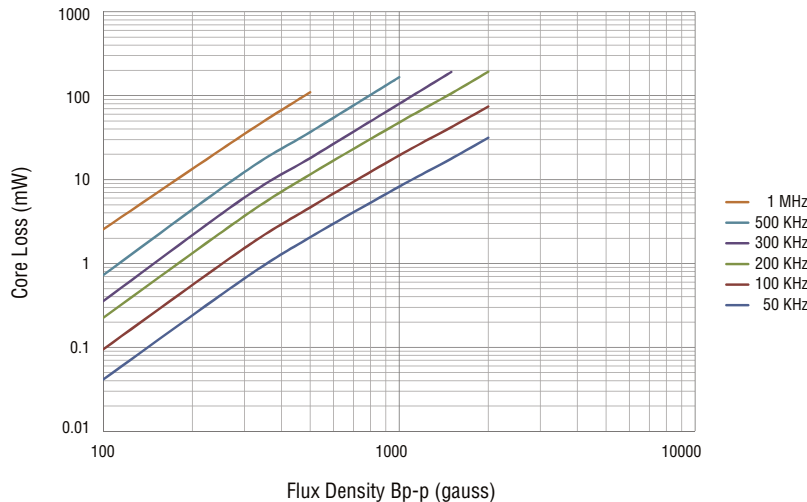
SRU5016 Series - Shielded SMD Power Inductors

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



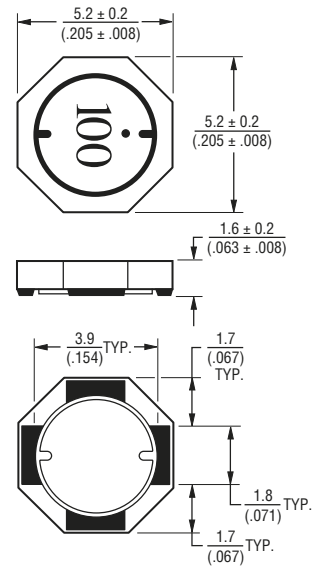
General Specifications

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

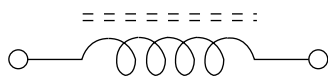
Materials

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

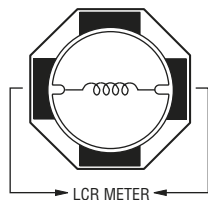
Product Dimensions



Electrical Schematic



Inductor Connection

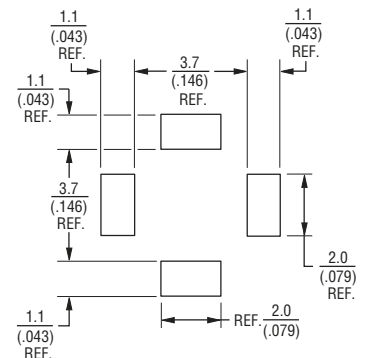


DIMENSIONS: $\frac{MM}{(INCHES)}$



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

Recommended Layout

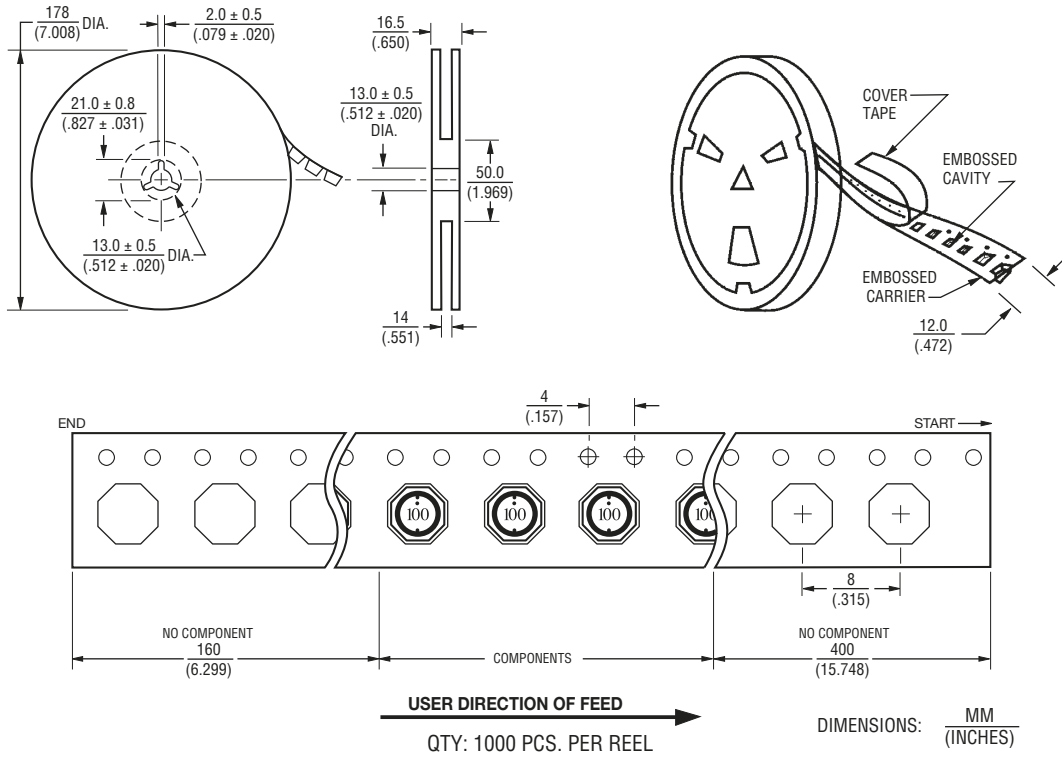


* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.
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SRU5016 Series - Shielded SMD Power Inductors

BOURNS®

Packaging Specifications



REV. 03/18

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