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
  - Car radios

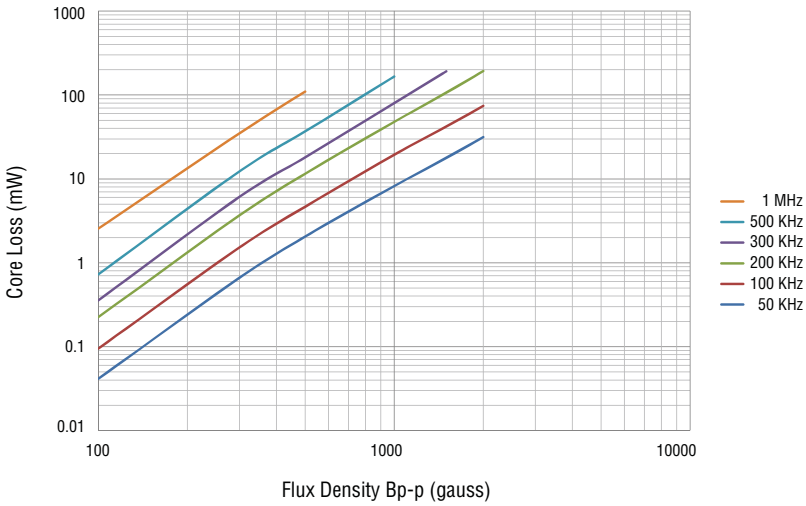
SRU5016 Series - Shielded SMD Power Inductors

Electrical Specifications

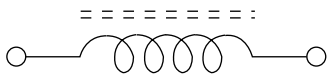
Bourns Part Number	Inductance @ 100 KHz L (μH)	Tol. (%)	Q Ref.	Test Freq. (MHz)	SRF Min. (MHz)	RDC .(mΩ)	I rms Max. (A)	I sat Typ. (A)	**K-Factor
SRU5016-1R8Y	1.8	±30	9	7.96	100	24	1.75	1.70	605
SRU5016-3R3Y	3.3	±30	9	7.96	80	35	1.55	1.50	462
SRU5016-4R7Y	4.7	±30	9	7.96	60	43	1.30	1.20	374
SRU5016-6R8Y	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, Bp-p (gauss) = K x L(μH) x Δ I (peak-to-peak ripple current, A), determine core loss from *Core Loss vs. Flux Density* plot.

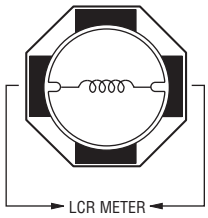
Core Loss vs. Flux Density



Electrical Schematic



Inductor Connection



* 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.
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.
Users should verify actual device performance in their specific applications.

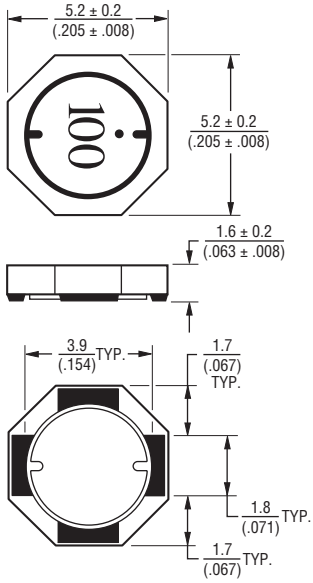
General Specifications

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.

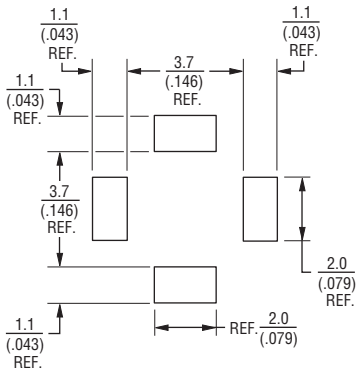
Materials

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..... 1000 pcs. per reel

Product Dimensions



Recommended Layout



DIMENSIONS: MM / (INCHES)

Packaging Specifications