

Features

- Available in E6 series
- Unit height of 1.8 mm
- Current up to 2.8 A
- RoHS compliant*

Applications

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

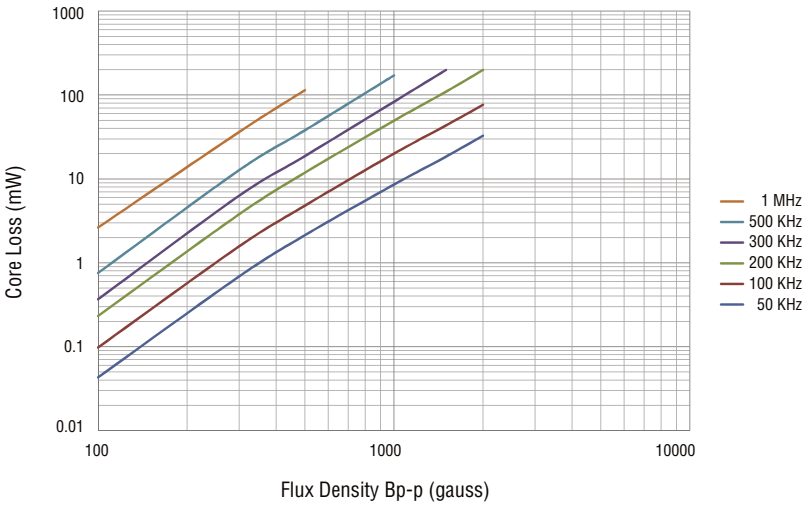
SRU5018 Series - Shielded SMD Power Inductors

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
SRU5018-1R0Y	1.0	±30	9	7.96	200	12.5	2.80	2.85	1105
SRU5018-1R5Y	1.5	±30	9	7.96	160	15.5	2.50	2.40	904
SRU5018-2R2Y	2.2	±30	10	7.96	130	20.5	2.30	2.10	765
SRU5018-3R5Y	3.5	±30	9	7.96	90	32.0	2.10	1.70	585
SRU5018-4R7Y	4.7	±30	8.5	7.96	80	36.0	2.00	1.55	524
SRU5018-6R8Y	6.8	±30	7.5	7.96	60	50.0	1.45	1.20	432
SRU5018-100Y	10.0	±30	12	2.52	50	65.0	1.25	1.05	368
SRU5018-150Y	15.0	±30	12	2.52	40	100.0	0.95	0.80	301
SRU5018-220Y	22.0	±30	12	2.52	28	160.0	0.68	0.65	243
SRU5018-330Y	33.0	±30	13	2.52	23	220.0	0.66	0.56	195
SRU5018-470Y	47.0	±30	13	2.52	18	330.0	0.54	0.45	163
SRU5018-680Y	68.0	±30	12	2.52	16	480.0	0.37	0.36	140
SRU5018-101Y	100.0	±30	15	0.796	15	620.0	0.32	0.31	117

**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



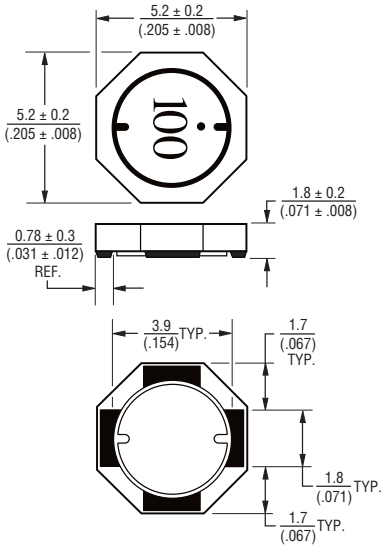
General Specifications

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

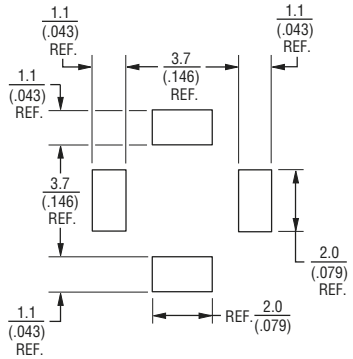
Materials

Core.....Ferrite DR and RI core
Wire .....Enameled copper
Terminal.....Ag/Ni/Sn
Rated Current..Ind. drop 35 % typ. at Isat
Temperature Rise
.....30 °C max. at rated Irms
Packaging..... 1000 pcs. per reel

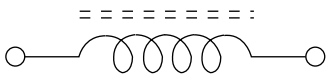
Product Dimensions



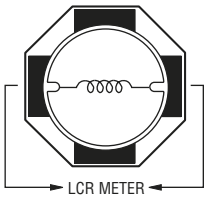
Recommended Layout



Electrical Schematic



Inductor Connection



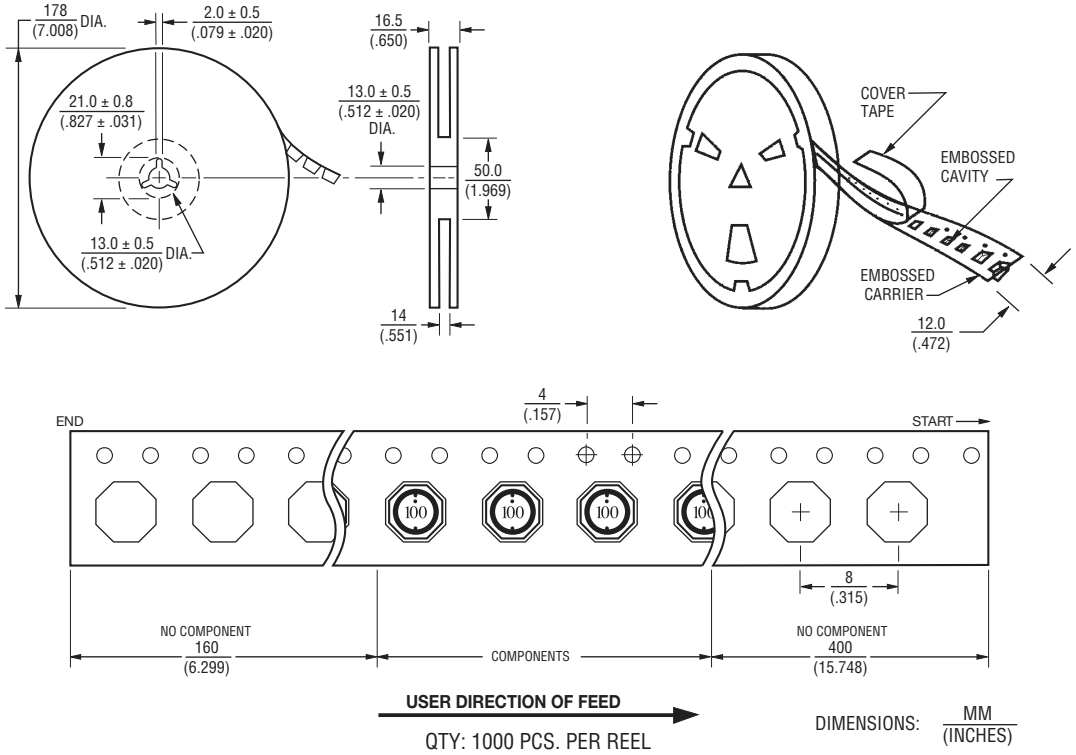
DIMENSIONS: MM (INCHES)

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.

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