THE DATASHEET OF

SRU8043-6R8Y

Features

- Available in E6 series
- Unit height of 4.3 mm
- Current up to 5.4 A
- RoHS compliant*

Applications

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

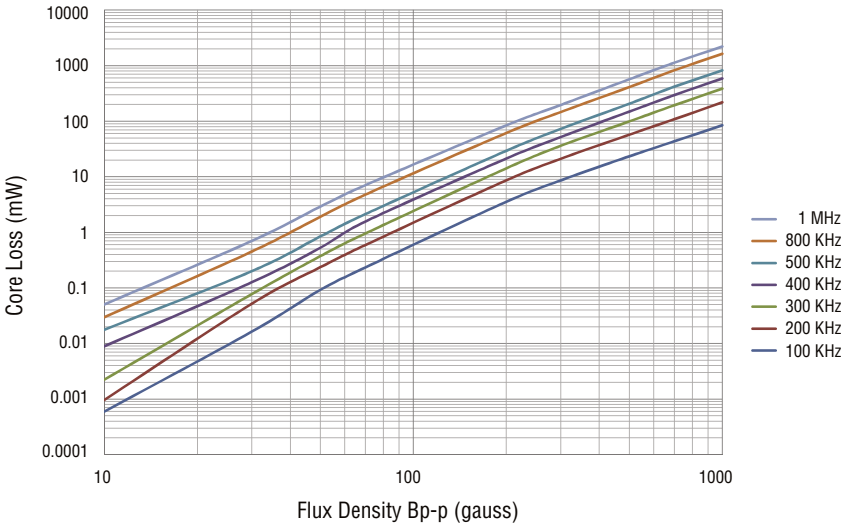
SRU8043 Series - Shielded SMD Power Inductors

Electrical Specifications

Bourns Part No.	Inductance 100 KHz (µH)	Tol. %	Q Ref.	Test Freq. (MHz)	SRF Min. (MHz)	RDC (mΩ)	Irms Max. (A)	Isat Typ. (A)	**K-Factor
SRU8043-2R2Y	2.2	± 30	15	7.96	65.0	11.2	5.40	5.20	250
SRU8043-3R9Y	3.9	± 30	15	7.96	42.0	14.6	4.80	4.00	191
SRU8043-4R7Y	4.7	± 30	13	7.96	36.0	17.0	4.60	3.60	171
SRU8043-6R8Y	6.8	± 30	12	7.96	30.0	22.4	3.80	3.10	141
SRU8043-100Y	10	± 30	27	2.52	20.0	30.0	3.50	2.70	120
SRU8043-120Y	12	± 30	15	2.52	15.0	39.0	2.80	2.20	110
SRU8043-150Y	15	± 30	26	2.52	15.0	46.0	2.70	2.00	98
SRU8043-180Y	18	± 30	15	2.52	15.0	62.0	2.30	1.70	87
SRU8043-220Y	22	± 30	24	2.52	12.0	72.5	2.20	1.70	79
SRU8043-270Y	27	±30	17	2.52	12.0	84.0	1.80	1.55	73
SRU8043-330Y	33	± 30	21	2.52	11.0	100.0	1.70	1.40	66
SRU8043-470Y	47	±30	21	2.52	9.0	120.0	1.50	1.20	55
SRU8043-680Y	68	±30	20	2.52	7.0	192.0	1.20	1.00	44
SRU8043-101Y	100	±30	50	0.796	6.0	287.0	1.00	0.80	38

**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



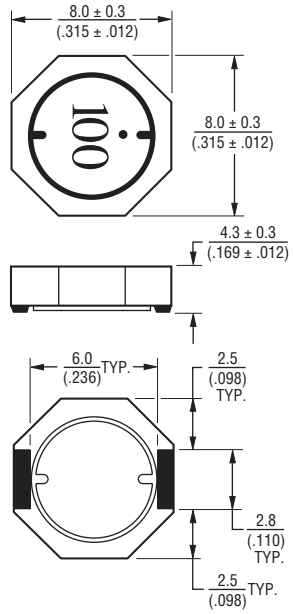
General Specifications

Test Voltage ..... 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

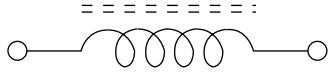
Materials

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 ..... 1000 pcs. per reel

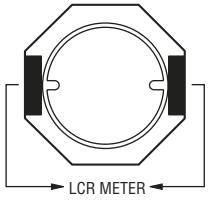
Product Dimensions



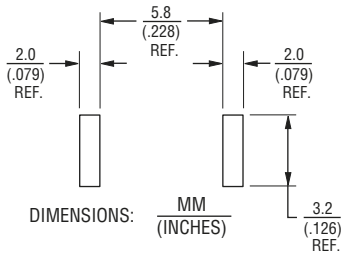
Electrical Schematic



Inductor Connection



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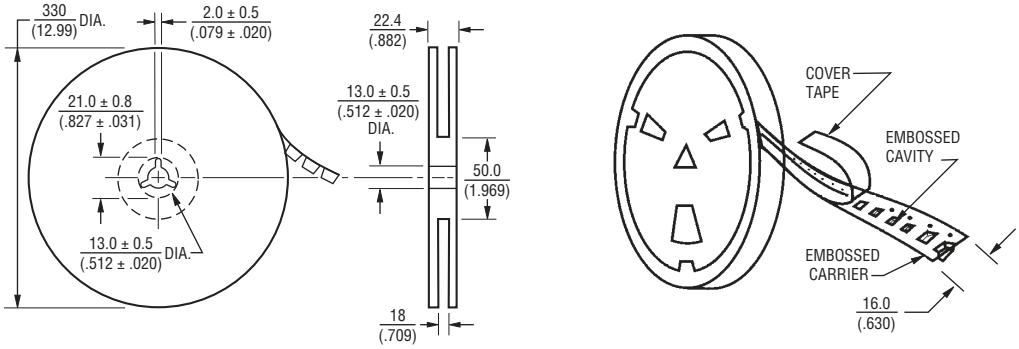
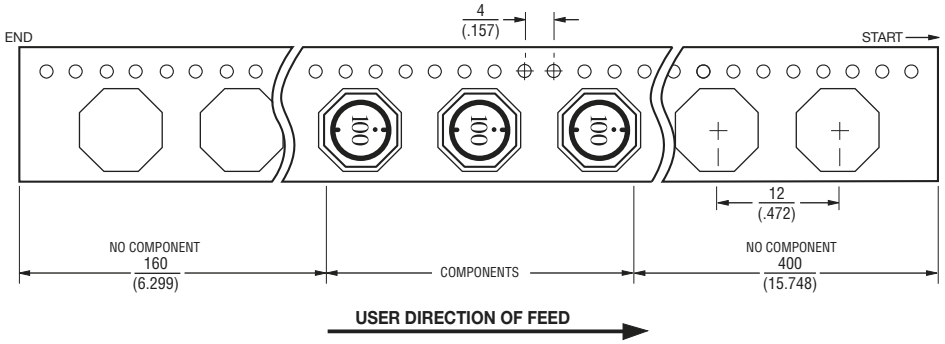
WARNING Cancer and Reproductive Harm
www.P65Warnings.ca.gov

Packaging Specifications





QTY: 1000 PCS. PER REEL

DIMENSIONS: MM / (INCHES)

REV. 03/18

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