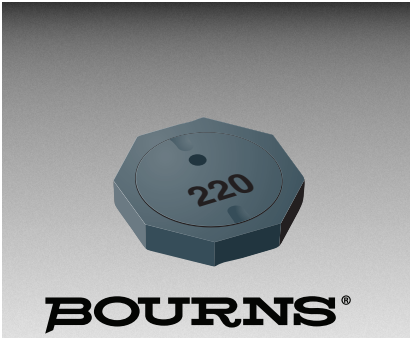




**THE DATASHEET OF  
SRU5011-100Y**





### Features

- Available in E6 series
- Unit height of 1.1 mm
- Current up to 1800 mA
- RoHS compliant\*



This series is currently available but not recommended for new designs.

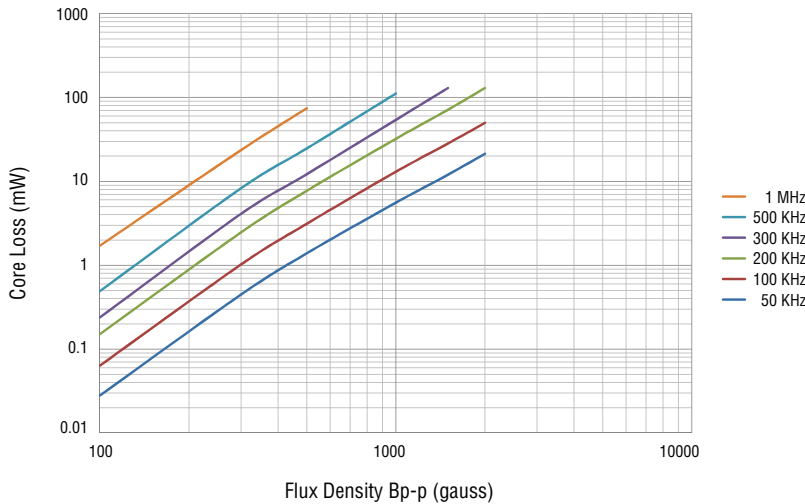
## SRU5011 Series - Shielded SMD Power Inductors

### Electrical Specifications

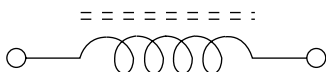
Bourns Part Number	Inductance @ 100 KHz		Q Ref.	Test Freq. (MHz)	SRF Min. (MHz)	RDC (.mΩ)	I rms Max. (A)	I sat Typ. (A)	**K-Factor
	L (μH)	Tol. (%)							
SRU5011-1R5Y	1.5	±30	8	7.96	195.0	32	1.80	1.50	904
SRU5011-2R5Y	2.5	±30	8	7.96	125.0	52	1.30	1.10	765
SRU5011-3R3Y	3.3	±30	8	7.96	110.0	66	1.15	0.94	585
SRU5011-4R7Y	4.7	±30	8	7.96	85.0	95	1.00	0.82	524
SRU5011-6R8Y	6.8	±30	8	7.96	70.0	130	0.82	0.68	398
SRU5011-100Y	10.0	±30	12	7.96	50.0	170	0.70	0.58	368
SRU5011-150Y	15.0	±30	12	2.52	42.0	250	0.60	0.48	284
SRU5011-220Y	22.0	±30	14	2.52	38.0	380	0.50	0.40	231
SRU5011-330Y	33.0	±30	14	2.52	30.0	550	0.38	0.30	188
SRU5011-470Y	47.0	±30	16	2.52	25.0	800	0.32	0.26	163
SRU5011-680Y	68.0	±30	14	2.52	20.0	1240	0.26	0.22	136
SRU5011-101Y	100.0	±30	30	0.796	15.0	1600	0.20	0.18	112

\*\*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

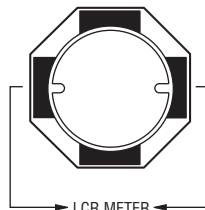


### Electrical Schematic



\*RoHS Directive 2015/863, Mar 31, 2015 and Annex. 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.

### Inductor Connection



**WARNING** Cancer and Reproductive Harm  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

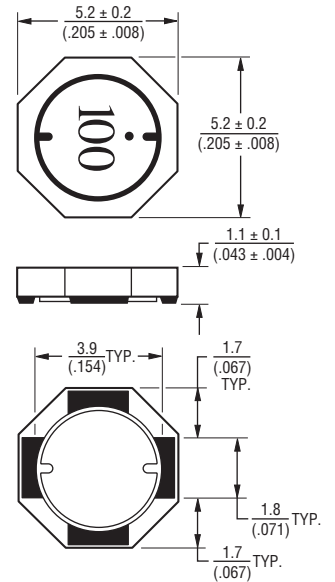
### General Specifications

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

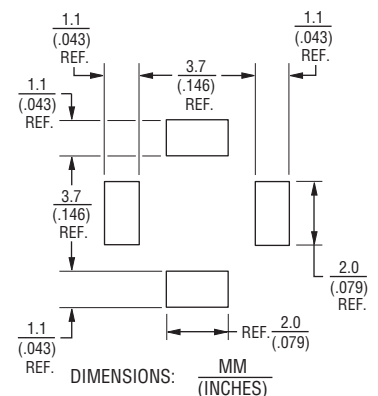
### Materials

Core ..... Ferrite DR and RI  
 Wire ..... Enameled copper  
 Terminal ..... Ag/Ni/Sn  
 Rated Current.. Ind. drop 35 % typ. at Isat  
 Temp. Rise..... 25 °C max. at rated I rms  
 Packaging ..... 1500 pcs. per reel

### Product Dimensions



### Recommended Layout



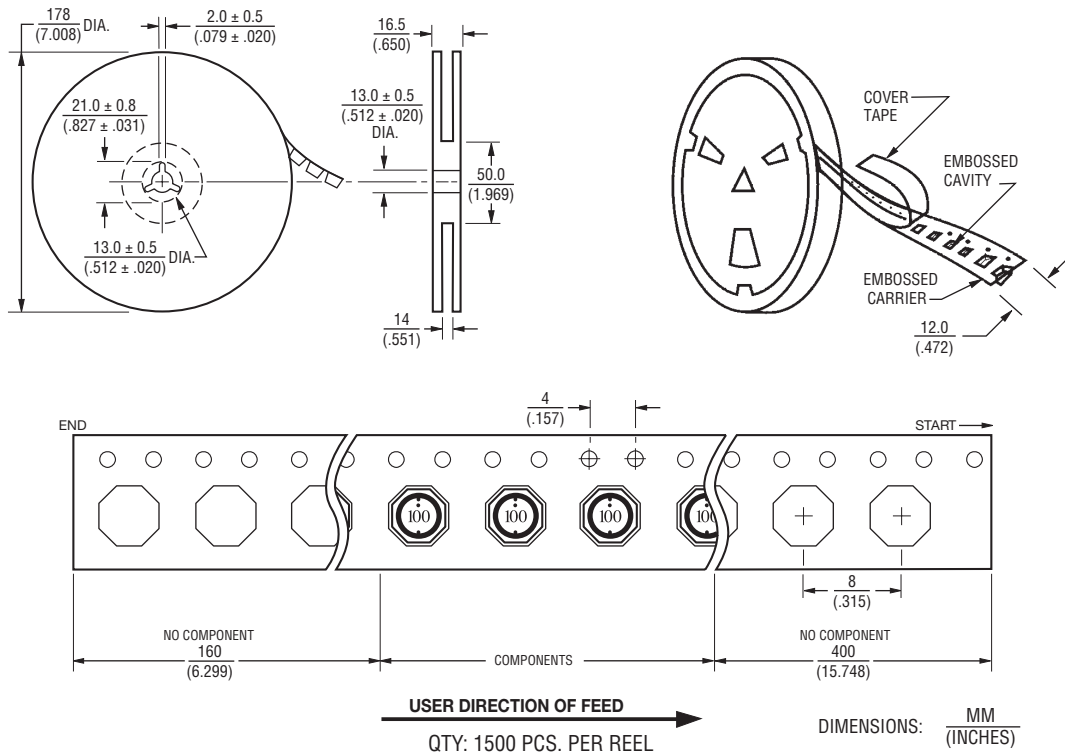
## Applications

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

## SRU5011 Series - Shielded SMD Power Inductors

**BOURNS®**

### Packaging Specifications



REV. 09/23

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.

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