



## Features

- Maximum height of 2.0 mm
- Current up to 3.6 A
- RoHS compliant\*

## Applications

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

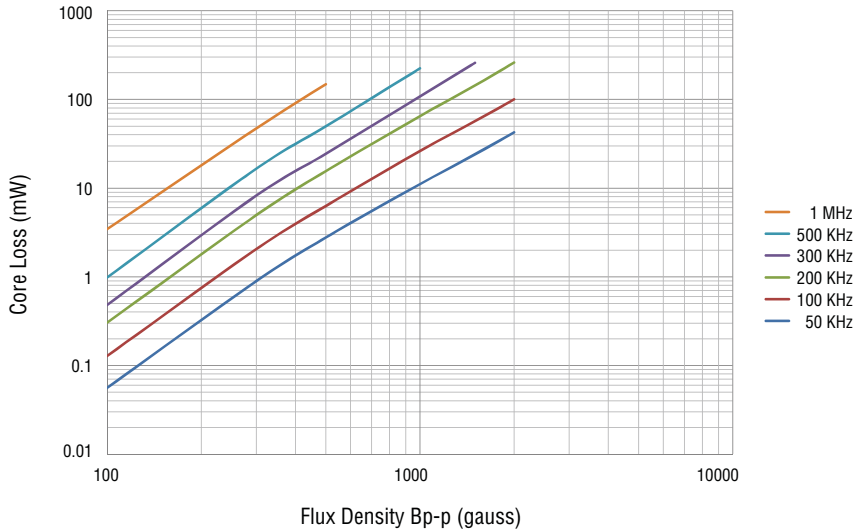
# SRU6018 Series - Shielded SMD Power Inductors

## Electrical Specifications

Bourns Part Number	Inductance @ 100 KHz		Q Ref.	Test Freq. (MHz)	SRF Typ. (MHz)	RDC Max. (mΩ)	I rms Max. (A)	I sat Typ. (A)	**K-Factor
	L (μH)	Tol. (%)							
SRU6018-1R2Y	1.2	±30	8	7.96	130	25	3.60	2.80	707
SRU6018-1R8Y	1.8	±30	8	7.96	90	28	3.00	2.30	579
SRU6018-3R3Y	3.3	±30	8	7.96	60	36	2.50	1.70	424
SRU6018-4R7Y	4.7	±30	8	7.96	50	52	2.20	1.40	374
SRU6018-6R8Y	6.8	±30	8	7.96	40	60	1.90	1.20	303
SRU6018-100Y	10	±30	12	2.52	30	88	1.70	1.00	236
SRU6018-150Y	15	±30	12	2.52	24	130	1.50	0.80	193
SRU6018-220Y	22	±30	14	2.52	18	190	1.20	0.65	163
SRU6018-330Y	33	±30	10	2.52	16	255	1.00	0.58	130
SRU6018-470Y	47	±30	12	2.52	14	410	0.80	0.46	108
SRU6018-680Y	68	±30	12	2.52	12	600	0.62	0.36	90
SRU6018-101Y	100	±30	20	2.52	9	715	0.50	0.34	77

\*\*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



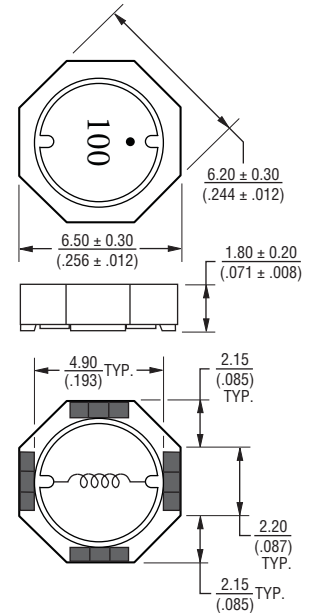
## General Specifications

Test Voltage ..... 0.1 V  
 Reflow Soldering .. 230 °C, 50 sec. max.  
 Operating Temp. .... -40 °C to +125 °C  
 (Temperature rise included)  
 Storage Temp. .... -40 °C to +125 °C  
 Resistance to Soldering Heat  
 ..... 260 °C for 10 sec.

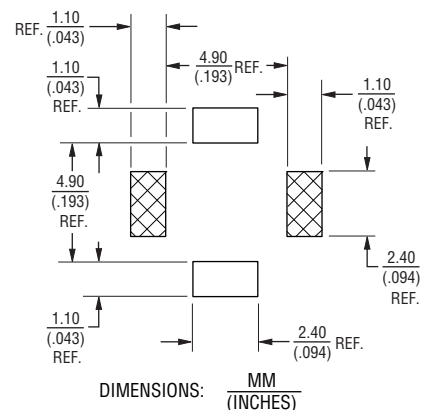
## Materials

Core ..... Ferrite DR and RI core  
 Wire ..... Enamelled copper  
 Terminal ..... Ag/Ni/Sn  
 Rated Current... Ind. drop 35 % typ. at Isat  
 Temp. Rise ..... 30 °C max. at rated I rms  
 Packaging ..... 800 pcs. per reel

## Product Dimensions



## Recommended Layout



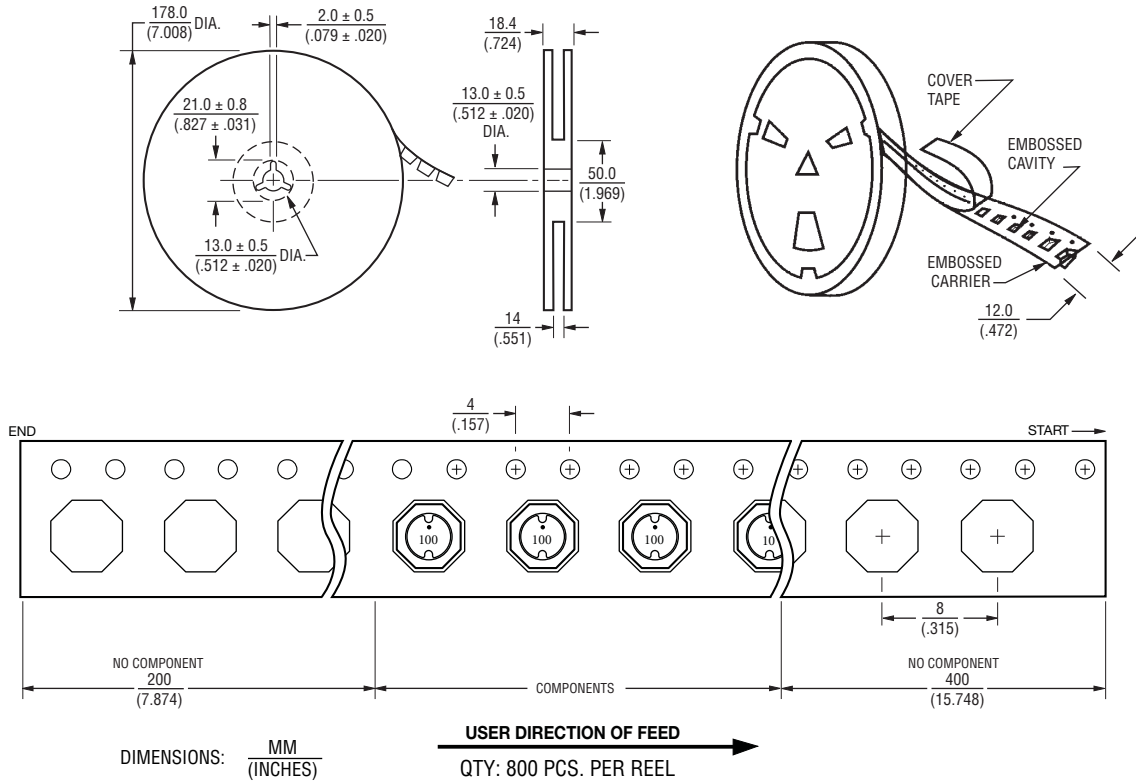
DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

\* 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.

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**BOURNS®**

## Packaging Specifications



REV. 11/13

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