



Features

- Available in E6 series
- Unit height of 2.8 mm
- Current up to 3.5 A
- RoHS compliant*

Applications

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

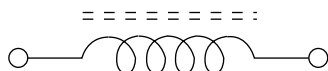
SRU6025 Series - Shielded SMD Power Inductors

Electrical Specifications

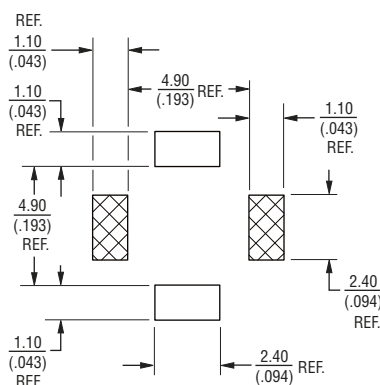
Bourns Part Number	Inductance @ 100 KHz		Q Ref.	Test Freq. (MHz)	SRF Typ. (MHz)	RDC Max. (mΩ)	I rms Max. (A)	I sat Typ. (A)	**K- Factor
	L (μH)	Tol. (%)							
SRU6025-1R2Y	1.2	±30	8	7.96	120	19	4.00	3.20	535
SRU6025-2R2Y	2.2	±30	8	7.96	65	24	3.40	2.35	370
SRU6025-3R3Y	3.3	±30	8	7.96	50	27	3.20	2.00	321
SRU6025-4R7Y	4.7	±30	8	7.96	42	35	2.70	1.55	253
SRU6025-6R8Y	6.8	±30	8	7.96	36	42	2.40	1.30	229
SRU6025-8R2Y	8.2	±30	8	7.96	30	52	2.20	1.25	193
SRU6025-100Y	10	±30	8	7.96	25	57	2.00	1.05	178
SRU6025-150Y	15	±30	12	2.52	22	86	1.80	0.92	146
SRU6025-220Y	22	±30	12	2.52	18	130	1.60	0.70	123
SRU6025-330Y	33	±30	12	2.52	12	180	1.20	0.64	98
SRU6025-470Y	47	±30	12	2.52	10	250	1.00	0.48	84
SRU6025-680Y	68	±30	10	2.52	8	365	0.80	0.40	68
SRU6025-101Y	100	±30	24	2.52	7	500	0.70	0.35	55
SRU6025-151Y	150	±30	30	2.52	5	770	0.54	0.28	47
SRU6025-221Y	220	±30	20	2.52	4	1250	0.42	0.24	39

**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 on page 2.

Electrical Schematic



Recommended Layout



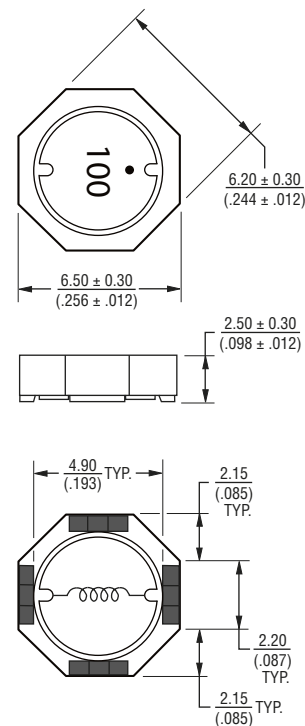
General Specifications

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.
 Moisture Sensitivity Level..... 1
 ESD Classification (HBM)..... N/A

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..... 600 pcs. per reel

Product Dimensions



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



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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Figure 1 is a log-log plot showing Core Loss (mW) versus Flux Density Bp-p (gauss). The x-axis represents Flux Density Bp-p (gauss) on a logarithmic scale from 100 to 10,000. The y-axis represents Core Loss (mW) on a logarithmic scale from 0.01 to 1,000. Six curves are plotted, corresponding to different frequencies: 1 MHz (orange), 500 KHz (light blue), 300 KHz (dark blue), 200 KHz (green), 100 KHz (red), and 50 KHz (dark blue). The curves show that core loss increases with both flux density and frequency.

Flux Density Bp-p (gauss)	1 MHz (mW)	500 KHz (mW)	300 KHz (mW)	200 KHz (mW)	100 KHz (mW)	50 KHz (mW)
100	~5	~1.5	~0.8	~0.5	~0.2	~0.08
1,000	~150	~40	~15	~8	~3	~1.2
10,000	~1,500	~400	~150	~80	~30	~12

Top View Dimensions:

- Overall Diameter: 178.0 ± 0.5 DIA. ($7.008 \pm .020$)
- Inner Diameter: 21.0 ± 0.8 ($.827 \pm .031$)
- Inner Diameter: 13.0 ± 0.5 ($.512 \pm .020$)
- Lead Diameter: 16.5 ($.650$)
- Lead Diameter: 13.0 ± 0.5 ($.512 \pm .020$)
- Lead Length: 50.0 (1.969)
- Lead Width: 14.0 ($.551$)

Side View Dimensions:

- Overall Thickness: 12.0 ($.472$)
- Embossed Carrier Thickness: 12.0 ($.472$)

End View Dimensions:

- Overall Length: 400 (15.748)
- Lead Spacing: 8 ($.315$)
- Lead Width: 14.0 ($.551$)
- Lead Length: 50.0 (1.969)

Other Dimensions:

- Lead Diameter: 16.5 ($.650$)
- Lead Length: 50.0 (1.969)
- Lead Width: 14.0 ($.551$)

Notes:

- NO COMPONENT 200 (7.874)
- COMPONENTS
- NO COMPONENT 400 (15.748)

USER DIRECTION OF FEED

QTY: 600 PCS. PER REEL

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