



Features

- Available in E6 series
- Low unit height of 3.3 mm
- High current
- RoHS compliant*

Applications

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

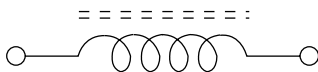
SRR0603 Series - Shielded Power Inductors

Electrical Specifications

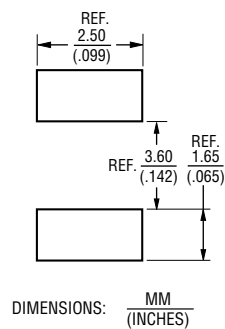
Bourns Part No.	Inductance 1 KHz		Q Ref.	Test Frequency (MHz)	SRF Min. (MHz)	RDC Max. (Ω)	I rms Max. (A)	I sat Typ. (A)	**K- Factor
	μH	Tol. %							
SRR0603-1R5ML	1.5	± 20	20	7.96	95.0	0.032	2.20	3.50	424
SRR0603-2R5ML	2.5	± 20	19	7.96	90.0	0.040	2.00	2.95	335
SRR0603-3R3ML	3.3	± 20	16	7.96	85.0	0.055	1.80	2.60	303
SRR0603-4R7ML	4.7	± 20	13	7.96	45.0	0.070	1.60	2.20	255
SRR0603-6R8ML	6.8	± 20	13	7.96	32.0	0.100	1.20	1.75	205
SRR0603-100ML	10	± 20	16	2.52	25.0	0.12	1.10	1.50	172
SRR0603-150ML	15	± 20	16	2.52	25.0	0.18	0.90	1.20	135
SRR0603-220ML	22	± 20	16	2.52	20.0	0.27	0.70	1.05	112
SRR0603-330KL	33	± 10	15	2.52	16.0	0.43	0.60	0.83	92
SRR0603-470KL	47	± 10	13	2.52	13.0	0.55	0.50	0.73	77
SRR0603-680KL	68	± 10	11	2.52	10.0	0.90	0.40	0.53	64
SRR0603-101KL	100	± 10	22	0.796	9.0	1.50	0.30	0.44	53
SRR0603-151KL	150	± 10	22	0.796	8.0	1.90	0.25	0.39	43
SRR0603-221KL	220	± 10	20	0.796	5.0	2.70	0.20	0.31	36
SRR0603-331KL	330	± 10	18	0.796	4.5	4.20	0.18	0.24	30
SRR0603-471KL	470	± 10	17	0.796	4.0	6.70	0.15	0.19	25
SRR0603-681KL	680	± 10	13	0.796	3.5	10.50	0.12	0.15	20
SRR0603-102KL	1000	± 10	20	0.252	3.0	14.00	0.10	0.13	17

**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.

Schematic



Recommended Layout



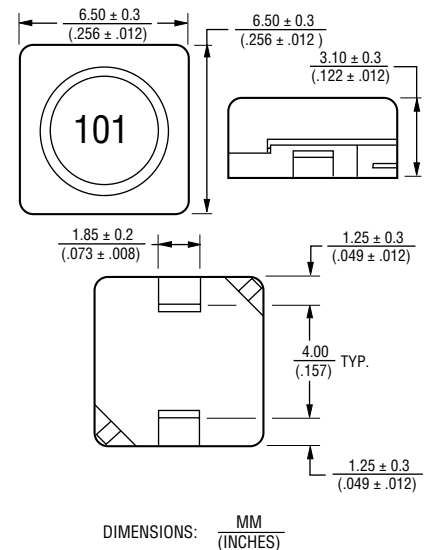
General Specifications

Test Voltage..... 1 Volt
 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 5 sec.
 Moisture Sensitivity Level..... 1
 ESD Classification (HBM)..... N/A

Materials

Core..... Ferrite DR & RI
 Wire..... Enameled copper
 Base..... LCP E4008
 Terminal..... Cu/Ni/Sn
 Rated Current
 Ind. drop of 10 % typ. at Isat
 Temp. Rise..... 40 °C max. at rated I rms
 Packaging..... 1000 pcs. per reel

Product Dimensions



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.

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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Figure 1 is a log-log plot showing Core Loss (mW) versus Flux Density B_{p-p} (gauss). The y-axis (Core Loss) ranges from 0.01 to 1000 mW, and the x-axis (Flux Density) ranges from 100 to 10000 gauss. The plot displays six curves corresponding to different frequencies: 10 KHz, 50 KHz, 100 KHz, 200 KHz, 300 KHz, and 800 KHz. Core loss increases with both flux density and frequency.

Flux Density B_{p-p} (gauss)	10 KHz (mW)	50 KHz (mW)	100 KHz (mW)	200 KHz (mW)	300 KHz (mW)	800 KHz (mW)
100	0.04	0.15	0.3	0.6	1.0	4.0
1000	3.0	15	30	60	100	400
10000	30	150	300	600	1000	>1000

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- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



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