



**THE DATASHEET OF
SRR0603-470KL**





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, 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.

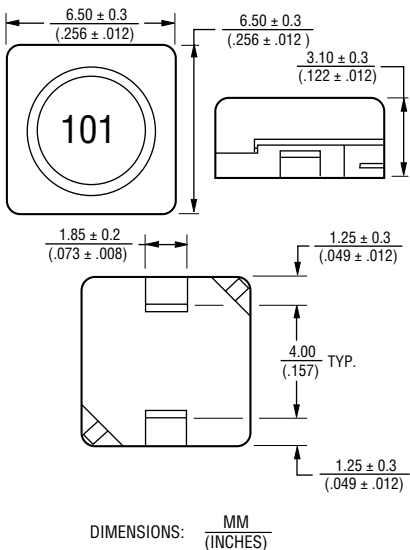
General Specifications

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

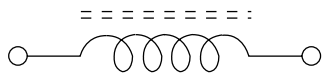
Materials

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

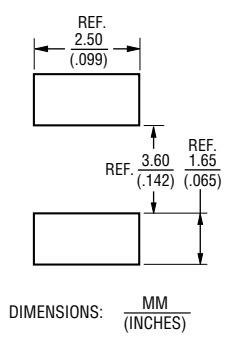
Product Dimensions



Schematic



Recommended Layout



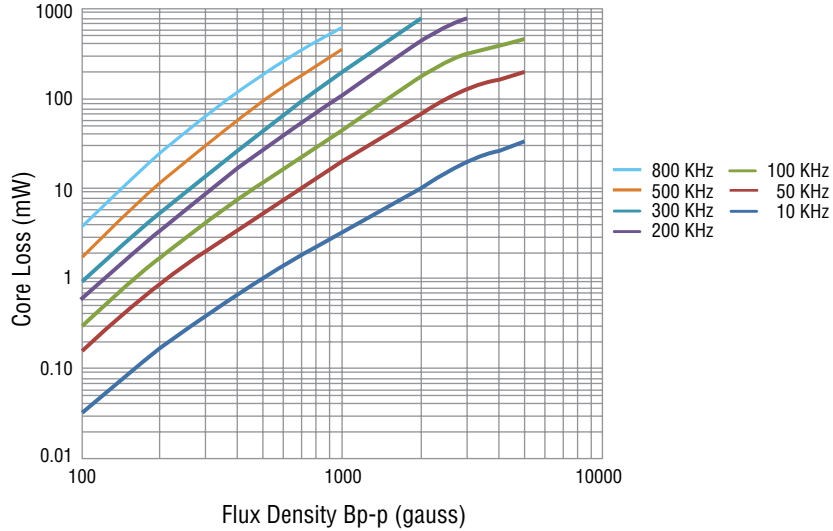
WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

*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. The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at www.bourns.com/docs/legal/disclaimer.pdf.

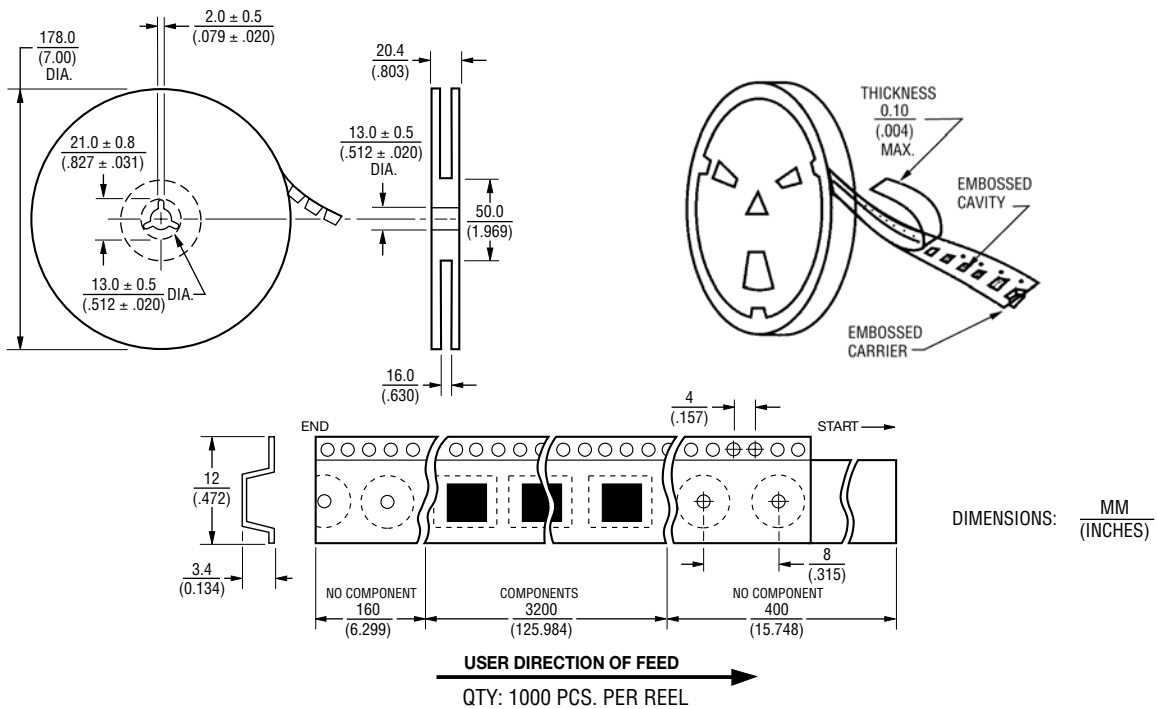
SRR0603 Series - Shielded Power Inductors

BOURNS®

Core Loss vs. Flux Density



Packaging Specifications



REV. 04/19

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Users should verify actual device performance in their specific applications.

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