



Features

- Available in E12 series
- Unit height of 3 mm
- Current up to 3 A
- RoHS compliant*

Applications

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

SRR6603 Series - Shielded Power Inductors

Electrical Specifications @ 25 °C

Bourns Part No.	Inductance 100 KHz		Q Min.	Test Frequency (Hz) Q		SRF Nom. (MHz)	RDC Max. (Ω)	I rms (A) Max.	I sat (A) Typ.
	μH	Tol. %		L/0.1 V	Q				
SRR6603-1R0ML	1.0	±20	10	100K	500K	70	0.040	3.00	1.200
SRR6603-1R5ML	1.5	±20	20	100K	500K	70	0.045	2.80	0.920
SRR6603-2R2ML	2.2	±20	25	100K	500K	70	0.050	1.80	0.800
SRR6603-3R3ML	3.3	±20	40	100K	200K	60	0.055	1.60	0.620
SRR6603-4R7ML	4.7	±20	40	100K	200K	60	0.060	1.40	0.500
SRR6603-6R8ML	6.8	±20	40	100K	200K	50	0.065	1.20	0.400
SRR6603-100ML	10.0	±20	40	100K	200K	38	0.075	1.00	0.320
SRR6603-150ML	15.0	±20	40	100K	100K	33	0.090	0.80	0.260
SRR6603-220ML	22.0	±20	40	100K	100K	25	0.110	0.70	0.240
SRR6603-330ML	33.0	±20	40	100K	100K	20	0.190	0.60	0.160
SRR6603-470ML	47.0	±20	40	100K	100K	20	0.230	0.50	0.140
SRR6603-680ML	68.0	±20	40	100K	100K	15	0.290	0.40	0.120
SRR6603-101ML	100.0	±20	40	100K	100K	10	0.480	0.30	0.100
SRR6603-151ML	150.0	±20	40	100K	100K	9	0.590	0.26	0.080
SRR6603-221ML	220.0	±20	40	100K	100K	6	0.770	0.22	0.070
SRR6603-331ML	330.0	±20	40	100K	100K	5	1.400	0.20	0.050
SRR6603-471ML	470.0	±20	40	100K	100K	4	1.800	0.19	0.045
SRR6603-561ML	560.0	±20	40	100K	100K	3.5	2.000	0.185	0.043
SRR6603-681ML	680.0	±20	40	100K	100K	3	2.200	0.18	0.040
SRR6603-102ML	1000.0	±20	40	100K	100K	2	3.400	0.15	0.028
SRR6603-152ML	1500.0	±20	50	100K	100K	2	4.200	0.12	0.024
SRR6603-222ML	2200.0	±20	50	100K	100K	2	8.500	0.10	0.020
SRR6603-332ML	3300.0	±20	50	100K	100K	1	11.00	00.08	0.018
SRR6603-472ML	4700.0	±20	50	100K	100K	1	13.90	00.06	0.014
SRR6603-682ML	6800.0	±20	50	100K	100K	1	25.00	00.04	0.012
SRR6603-103ML	10000.0	±20	50	100K	100K	0.8	32.80	00.02	0.010

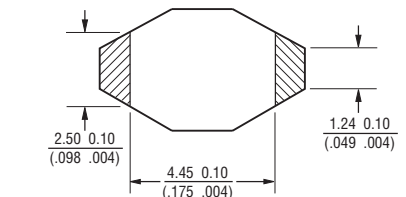
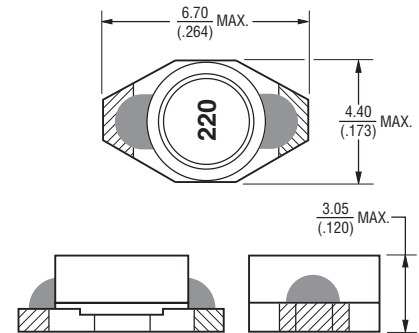
General Specifications

Test Voltage 0.1 V
 Operating Temperature -55 °C to +125 °C
 (Temperature rise included)
 Storage Temperature -55 °C to +125 °C
 Moisture Sensitivity Level 1
 ESD Classification (HBM) N/A

Materials

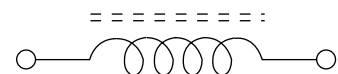
Core Ferrite DR & RI
 Wire Enameled copper
 Base Ceramic
 Terminal Ag/Ni/Au
 Rated Current
 Ind. drop of 30 % typ. at Isat
 Temperature Rise 30 °C max. at rated Irms
 Packaging 600 pcs. per reel

Product Dimensions



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

Schematic

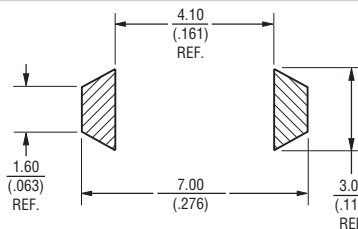


Additional Information

Click these links for more information:



Recommended Layout



CALIFORNIA WARNING: Can expose you to lead, a carcinogen and reproductive toxicant.
 See www.P65Warnings.ca.gov

*RoHS Directive 2015/863, Mar 31, 2015 and Annex.
 Specifications are subject to change without notice.

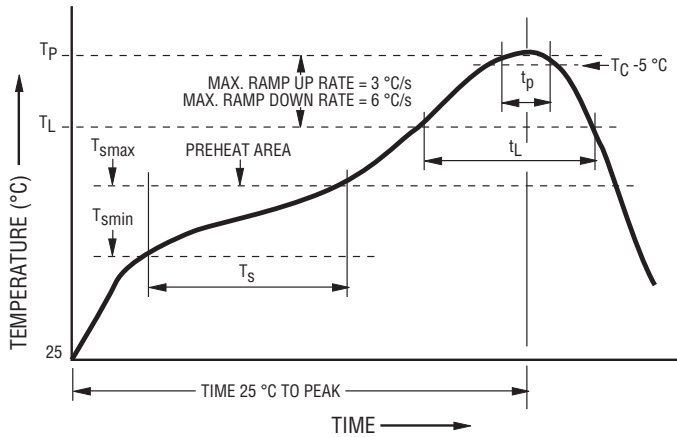
Users should verify actual device performance in their specific applications.

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SRR6603 Series - Shielded Power Inductors

BOURNS®

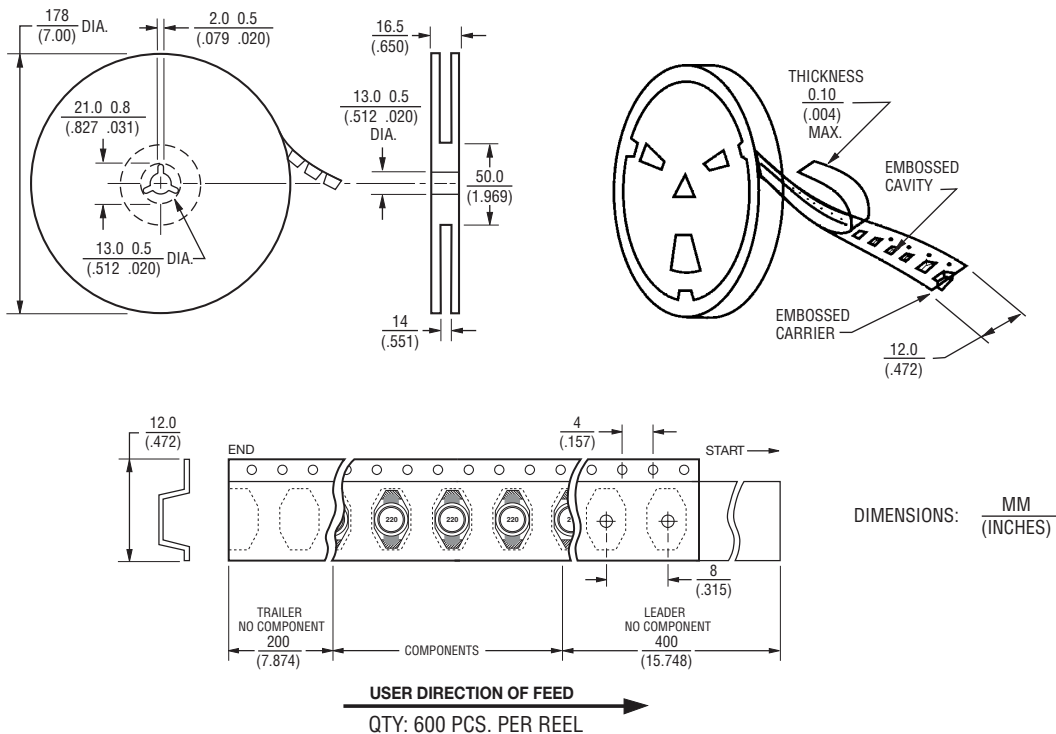
Soldering Profile



Profile Feature	Pb-Free Assembly
Preheat / Soak:	
Temperature Min. (T_{smin})	150 °C
Temperature Max. (T_{smax})	200 °C
Time (t_s) from (T_{smin} to T_{smax})	60~120 seconds
Ramp Up Rate (T_L to T_p)	3 °C / second max.
Liquidous Temperature (T_L)	217 °C
Time (t_L) maintained above T_L	60~150 seconds
Classification Temperature (T_C)	250 °C
Time (t_p) within 5 °C of the specified classification temperature (T_C)	< 30 seconds
Ramp Down Rate (T_p to T_L)	6 °C / second max.
Time 25 °C to Peak Temperature	8 minutes max.

NOTE: The product has been tested under this reflow condition. Deviations from this, especially higher temperatures or longer durations, could impact performance.

Packaging Specifications



REV. 02/26

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