



**THE DATASHEET OF
SRR1208-390YL**





Features

- Available in E6 series
- Unit height of 8.5 mm
- Current rating up to 7.5 A
- RoHS compliant*

Applications

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

SRR1208 Series - Shielded High Power Inductors

Electrical Characteristics

| 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) |
|-----------------|------------------|--------|--------|----------------------|----------------|--------------|---------------------------|---------------------------|
| | (μH) | Tol. % | | | | | | |
| SRR1208-2R5ML | 2.5 | ± 20 | 20 | 7.96 | 37 | 0.011 | 7.50 | 10.00 |
| SRR1208-4R5ML | 4.5 | ± 20 | 24 | 7.96 | 30 | 0.014 | 6.50 | 10.00 |
| SRR1208-6R5ML | 6.5 | ± 20 | 25 | 7.96 | 20 | 0.018 | 6.00 | 8.40 |
| SRR1208-100ML | 10 | ± 20 | 20 | 2.52 | 15 | 0.021 | 5.00 | 6.70 |
| SRR1208-120ML | 12 | ± 20 | 19 | 2.52 | 11 | 0.025 | 4.80 | 6.50 |
| SRR1208-150ML | 15 | ± 20 | 21 | 2.52 | 11 | 0.036 | 4.00 | 5.60 |
| SRR1208-180ML | 18 | ± 20 | 21 | 2.52 | 9.0 | 0.040 | 3.80 | 4.00 |
| SRR1208-220ML | 22 | ± 20 | 23 | 2.52 | 7.0 | 0.043 | 3.50 | 4.00 |
| SRR1208-270ML | 27 | ± 20 | 23 | 2.52 | 6.5 | 0.048 | 3.00 | 4.30 |
| SRR1208-330YL | 33 | ± 15 | 23 | 2.52 | 6.5 | 0.062 | 2.80 | 3.80 |
| SRR1208-390YL | 39 | ± 15 | 25 | 2.52 | 6.0 | 0.076 | 2.50 | 3.40 |
| SRR1208-470YL | 47 | ± 15 | 24 | 2.52 | 5.0 | 0.085 | 2.20 | 3.10 |
| SRR1208-560YL | 56 | ± 15 | 23 | 2.52 | 5.0 | 0.110 | 2.00 | 2.80 |
| SRR1208-680YL | 68 | ± 15 | 20 | 2.52 | 5.0 | 0.135 | 1.80 | 2.60 |
| SRR1208-820YL | 82 | ± 15 | 18 | 2.52 | 4.0 | 0.150 | 1.60 | 2.30 |
| SRR1208-101YL | 100 | ± 15 | 15 | 0.796 | 4.0 | 0.170 | 1.50 | 2.10 |
| SRR1208-121YL | 120 | ± 15 | 15 | 0.796 | 3.0 | 0.190 | 1.40 | 2.00 |
| SRR1208-151YL | 150 | ± 15 | 14 | 0.796 | 3.0 | 0.240 | 1.30 | 1.72 |
| SRR1208-181YL | 180 | ± 15 | 14 | 0.796 | 2.5 | 0.270 | 1.20 | 1.70 |
| SRR1208-221KL | 220 | ± 10 | 13 | 0.796 | 2.5 | 0.380 | 1.10 | 1.45 |
| SRR1208-271KL | 270 | ± 10 | 13 | 0.796 | 2.0 | 0.400 | 0.95 | 1.25 |
| SRR1208-331KL | 330 | ± 10 | 13 | 0.796 | 1.8 | 0.650 | 0.85 | 1.12 |
| SRR1208-391KL | 390 | ± 10 | 14 | 0.796 | 1.6 | 0.670 | 0.80 | 1.10 |
| SRR1208-471KL | 470 | ± 10 | 14 | 0.796 | 1.4 | 0.850 | 0.70 | 0.95 |
| SRR1208-561KL | 560 | ± 10 | 14 | 0.796 | 1.4 | 0.900 | 0.65 | 0.90 |
| SRR1208-681KL | 680 | ± 10 | 13 | 0.796 | 1.2 | 1.00 | 0.60 | 0.82 |
| SRR1208-821KL | 820 | ± 10 | 12 | 0.796 | 1.2 | 1.15 | 0.55 | 0.77 |
| SRR1208-102KL | 1000 | ± 10 | 11 | 0.252 | 1.0 | 1.65 | 0.50 | 0.67 |
| SRR1208-122KL | 1200 | ± 10 | 10 | 0.252 | 0.80 | 2.00 | 0.40 | 0.57 |
| SRR1208-152KL | 1500 | ± 10 | 10 | 0.252 | 0.75 | 2.35 | 0.36 | 0.55 |
| SRR1208-182KL | 1800 | ± 10 | 20 | 0.252 | 0.70 | 3.40 | 0.46 | 0.48 |
| SRR1208-222KL | 2200 | ± 10 | 20 | 0.252 | 0.65 | 4.20 | 0.40 | 0.42 |
| SRR1208-272KL | 2700 | ± 10 | 20 | 0.252 | 0.60 | 5.20 | 0.35 | 0.38 |
| SRR1208-332KL | 3300 | ± 10 | 20 | 0.252 | 0.50 | 6.40 | 0.32 | 0.35 |
| SRR1208-392KL | 3900 | ± 10 | 20 | 0.252 | 0.45 | 7.80 | 0.30 | 0.32 |
| SRR1208-472KL | 4700 | ± 10 | 20 | 0.252 | 0.42 | 9.60 | 0.28 | 0.30 |
| SRR1208-562KL | 5600 | ± 10 | 18 | 0.252 | 0.40 | 12.0 | 0.25 | 0.28 |
| SRR1208-682KL | 6800 | ± 10 | 18 | 0.252 | 0.38 | 15.2 | 0.22 | 0.25 |
| SRR1208-822KL | 8200 | ± 10 | 16 | 0.252 | 0.35 | 17.0 | 0.20 | 0.22 |
| SRR1208-103KL | 10000 | ± 10 | 24 | 0.0796 | 0.30 | 19.2 | 0.18 | 0.20 |

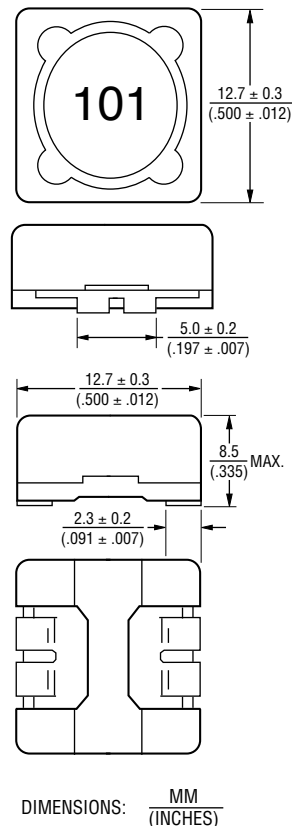
General Specifications

Test Voltage 1 V
 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.
 Rated Current Ind. drop of 10 % typ. at Isat
 Temperature Rise 40 °C max. at rated Irms

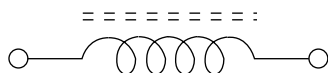
Materials

Core Ferrite DR & RI core
 Wire Enameled copper
 Base LCP E4008
 Terminal Cu/Ni/Sn
 Packaging 400 pcs. per reel

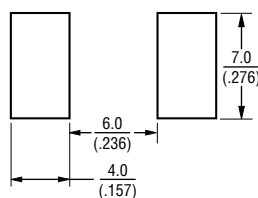
Product Dimensions



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.

SRR1208 Series - Shielded High Power Inductors

BOURNS®

Packaging Specifications



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

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REV. 01/17

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Users should verify actual device performance in their specific applications.

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