



**THE DATASHEET OF
SRR7045-680M**





Features

- Available in E6 values
- Current rating to 3.50 amps
- RoHS compliant*

Applications

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

SRR7045 Series - Shielded SMD Power Inductors

Electrical Specifications

| Bourns Part No. | Inductance 1 KHz | | Q Typ. | Test Frequency (MHz) | SRF Typ. (MHz) | RDC Max. (Ω) | I rms Max. (A) | I sat Typ. (A) |
|-----------------|------------------|--------|-----------|----------------------------|----------------------|--------------------|----------------------|----------------------|
| | uH | Tol. % | | | | | | |
| SRR7045-1R0M | 1.0 | ±20 | 10 | 7.96 | 160 | 0.020 | 5.20 | 6.00 |
| SRR7045-2R2M | 2.2 | ±20 | 10 | 7.96 | 95 | 0.022 | 4.20 | 4.20 |
| SRR7045-2R7M | 2.7 | ±20 | 10 | 7.96 | 60 | 0.027 | 3.50 | 3.50 |
| SRR7045-3R3M | 3.3 | ±20 | 12 | 7.96 | 90 | 0.027 | 3.50 | 3.30 |
| SRR7045-3R9M | 3.9 | ±20 | 12 | 7.96 | 75 | 0.030 | 3.40 | 3.20 |
| SRR7045-4R7M | 4.7 | ±20 | 12 | 7.96 | 60 | 0.033 | 3.30 | 2.80 |
| SRR7045-5R6M | 5.6 | ±20 | 12 | 7.96 | 50 | 0.035 | 3.20 | 2.50 |
| SRR7045-6R3M | 6.3 | ±20 | 10 | 7.96 | 30 | 0.038 | 2.45 | 3.00 |
| SRR7045-6R8M | 6.8 | ±20 | 12 | 7.96 | 40 | 0.036 | 3.10 | 2.40 |
| SRR7045-100M | 10 | ±20 | 40 | 2.52 | 23 | 0.048 | 2.70 | 1.90 |
| SRR7045-120M | 12 | ±20 | 40 | 2.52 | 20 | 0.054 | 2.40 | 1.80 |
| SRR7045-150M | 15 | ±20 | 40 | 2.52 | 17 | 0.062 | 2.20 | 1.50 |
| SRR7045-180M | 18 | ±20 | 40 | 2.52 | 16 | 0.070 | 2.10 | 1.40 |
| SRR7045-220M | 22 | ±20 | 40 | 2.52 | 15 | 0.082 | 1.90 | 1.30 |
| SRR7045-270M | 27 | ±20 | 30 | 2.52 | 13.5 | 0.100 | 1.80 | 1.15 |
| SRR7045-330M | 33 | ±20 | 30 | 2.52 | 11 | 0.115 | 1.60 | 1.00 |
| SRR7045-390M | 39 | ±20 | 30 | 2.52 | 10.5 | 0.130 | 1.50 | 0.95 |
| SRR7045-470M | 47 | ±20 | 30 | 2.52 | 10 | 0.160 | 1.40 | 0.90 |
| SRR7045-560M | 56 | ±20 | 25 | 2.52 | 9 | 0.180 | 1.30 | 0.80 |
| SRR7045-680M | 68 | ±20 | 25 | 2.52 | 8.5 | 0.210 | 1.20 | 0.75 |
| SRR7045-820M | 82 | ±20 | 25 | 2.52 | 6.5 | 0.270 | 1.10 | 0.65 |
| SRR7045-101M | 100 | ±20 | 40 | 0.796 | 6 | 0.300 | 1.00 | 0.60 |
| SRR7045-121M | 120 | ±20 | 40 | 0.796 | 5.5 | 0.380 | 0.90 | 0.55 |
| SRR7045-151M | 150 | ±20 | 40 | 0.796 | 5 | 0.460 | 0.80 | 0.50 |
| SRR7045-181M | 180 | ±20 | 40 | 0.796 | 4.7 | 0.600 | 0.66 | 0.45 |
| SRR7045-221M | 220 | ±20 | 40 | 0.796 | 4.5 | 0.690 | 0.64 | 0.40 |
| SRR7045-271M | 270 | ±20 | 40 | 0.796 | 4 | 0.600 | 0.62 | 0.30 |
| SRR7045-331M | 330 | ±20 | 40 | 0.796 | 3.8 | 0.730 | 0.60 | 0.27 |
| SRR7045-391M | 390 | ±20 | 50 | 0.796 | 3.6 | 1.000 | 0.54 | 0.25 |
| SRR7045-471M | 470 | ±20 | 50 | 0.796 | 3.2 | 1.100 | 0.50 | 0.23 |
| SRR7045-561M | 560 | ±20 | 50 | 0.796 | 2.9 | 1.340 | 0.45 | 0.21 |
| SRR7045-681M | 680 | ±20 | 50 | 0.796 | 2.5 | 1.600 | 0.40 | 0.20 |
| SRR7045-821M | 820 | ±20 | 50 | 0.796 | 2.4 | 1.850 | 0.37 | 0.18 |
| SRR7045-102M | 1000 | ±20 | 90 | 0.252 | 2.2 | 2.370 | 0.33 | 0.16 |

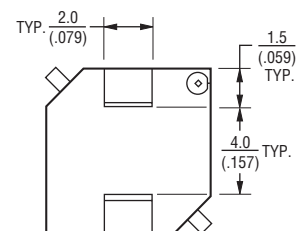
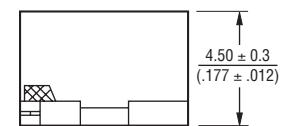
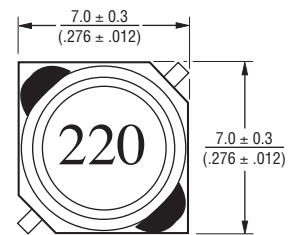
General Specifications

Test Voltage 0.5 V
 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 10 sec.
 Moisture Sensitivity Level 1
 ESD Classification (HBM) N/A

Materials

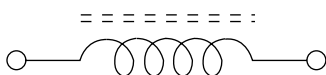
Core Ferrite DR & RI
 Wire Enamelled copper wire 130
 Terminal Cu/Ni/Sn
 Rated Current
 Ind. drop of 10 % typ. at Isat
 (-1R0M, -2R2M, -3R3M through
 -5R6M, -6R8M through -221M)
 Ind. drop of 20 % typ. at Isat
 (-2R7M, -6R3M)
 Ind. drop of 25 % typ. at Isat
 (-271M through -102M)
 Temperature Rise
 40 °C max. at rated I rms
 Packaging 1000 pcs. per reel

Product Dimensions

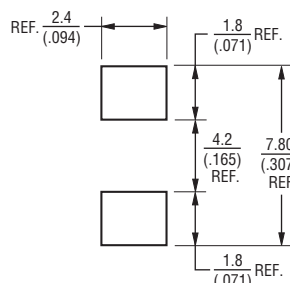


DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

Schematic



Recommended Layout



WARNING Cancer and Reproductive Harm
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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SRR7045 Series - Shielded SMD Power Inductors

BOURNS®

Packaging Specifications



USER DIRECTION OF FEED →
QTY: 1000 PCS. PER REEL

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

REV. 10/20

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