



## 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<br>Typ. | Test<br>Frequency<br>(MHz) | SRF<br>Typ.<br>(MHz) | RDC<br>Max.<br>(Ω) | I rms<br>Max.<br>(A) | I sat<br>Typ.<br>(A) |
|-----------------|------------------|--------|-----------|----------------------------|----------------------|--------------------|----------------------|----------------------|
|                 | uH               | Tol. % |           |                            |                      |                    |                      |                      |
| SRR7045-1R0M    | 1.0              | ±20    | 10        | 7.96                       | 60                   | 0.020              | 3.50                 | 3.20                 |
| SRR7045-2R2M    | 2.2              | ±20    | 10        | 7.96                       | 60                   | 0.022              | 2.80                 | 2.50                 |
| SRR7045-2R7M    | 2.7              | ±20    | 10        | 7.96                       | 60                   | 0.027              | 2.78                 | 3.10                 |
| SRR7045-3R3M    | 3.3              | ±20    | 10        | 7.96                       | 43                   | 0.027              | 2.50                 | 2.20                 |
| SRR7045-3R9M    | 3.9              | ±20    | 10        | 7.96                       | 40                   | 0.028              | 2.71                 | 2.43                 |
| SRR7045-4R7M    | 4.7              | ±20    | 10        | 7.96                       | 35                   | 0.030              | 2.64                 | 2.20                 |
| SRR7045-5R6M    | 5.6              | ±20    | 10        | 7.96                       | 33                   | 0.036              | 2.38                 | 2.00                 |
| SRR7045-6R3M    | 6.3              | ±20    | 10        | 7.96                       | 30                   | 0.038              | 2.33                 | 1.85                 |
| SRR7045-6R8M    | 6.8              | ±20    | 10        | 7.96                       | 28                   | 0.036              | 2.20                 | 2.00                 |
| SRR7045-100M    | 10               | ±20    | 30        | 2.52                       | 25                   | 0.042              | 2.00                 | 1.70                 |
| SRR7045-120M    | 12               | ±20    | 27        | 2.52                       | 23                   | 0.050              | 1.85                 | 1.40                 |
| SRR7045-150M    | 15               | ±20    | 31        | 2.52                       | 24                   | 0.062              | 1.60                 | 1.35                 |
| SRR7045-180M    | 18               | ±20    | 29        | 2.52                       | 21                   | 0.070              | 1.50                 | 1.15                 |
| SRR7045-220M    | 22               | ±20    | 26        | 2.52                       | 21                   | 0.070              | 1.50                 | 1.15                 |
| SRR7045-270M    | 27               | ±20    | 25        | 2.52                       | 18                   | 0.110              | 1.25                 | 1.00                 |
| SRR7045-330M    | 33               | ±20    | 25        | 2.52                       | 12                   | 0.115              | 1.15                 | 0.90                 |
| SRR7045-390M    | 39               | ±20    | 26        | 2.52                       | 13                   | 0.130              | 1.10                 | 0.80                 |
| SRR7045-470M    | 47               | ±20    | 29        | 2.52                       | 11                   | 0.150              | 0.95                 | 0.78                 |
| SRR7045-560M    | 56               | ±20    | 21        | 2.52                       | 11                   | 0.200              | 0.85                 | 0.65                 |
| SRR7045-680M    | 68               | ±20    | 22        | 2.52                       | 10                   | 0.210              | 0.77                 | 0.60                 |
| SRR7045-820M    | 82               | ±20    | 22        | 2.52                       | 9                    | 0.280              | 0.70                 | 0.60                 |
| SRR7045-101M    | 100              | ±20    | 40        | 0.796                      | 8                    | 0.300              | 0.65                 | 0.50                 |
| SRR7045-121M    | 120              | ±20    | 30        | 0.796                      | 7                    | 0.420              | 0.60                 | 0.45                 |
| SRR7045-151M    | 150              | ±20    | 51        | 0.796                      | 7                    | 0.480              | 0.53                 | 0.41                 |
| SRR7045-181M    | 180              | ±20    | 52        | 0.796                      | 5                    | 0.660              | 0.475                | 0.375                |
| SRR7045-221M    | 220              | ±20    | 44        | 0.796                      | 5                    | 0.700              | 0.45                 | 0.36                 |
| SRR7045-271M    | 270              | ±20    | 30        | 0.796                      | 5                    | 0.840              | 0.40                 | 0.275                |
| SRR7045-331M    | 330              | ±20    | 65        | 0.796                      | 4                    | 0.730              | 0.40                 | 0.25                 |
| SRR7045-391M    | 390              | ±20    | 27        | 0.796                      | 5                    | 1.200              | 0.35                 | 0.225                |
| SRR7045-471M    | 470              | ±20    | 80        | 0.796                      | 3                    | 1.100              | 0.32                 | 0.22                 |
| SRR7045-561M    | 560              | ±20    | 27        | 0.796                      | 4                    | 1.600              | 0.30                 | 0.20                 |
| SRR7045-681M    | 680              | ±20    | 65        | 0.796                      | 3                    | 1.600              | 0.27                 | 0.20                 |
| SRR7045-821M    | 820              | ±20    | 26        | 0.796                      | 3                    | 2.200              | 0.25                 | 0.175                |
| SRR7045-102M    | 1000             | ±20    | 90        | 0.252                      | 3                    | 2.400              | 0.25                 | 0.15                 |

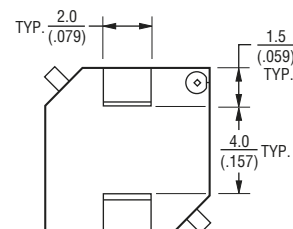
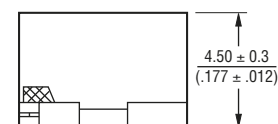
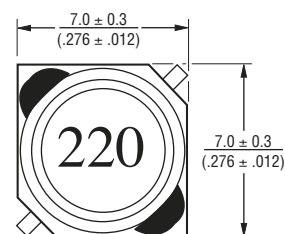
## General Specifications

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

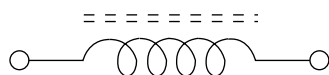
Core ..... Ferrite DR & RI  
 Wire ..... Enameled copper wire 130  
 Terminal ..... Cu/Ni/Sn  
 Rated Current  
 ..... Ind. drop of 10 % typ. at Isat  
 (-1R0M through -221M)  
 ..... Ind. drop of 25 % typ. at Isat  
 (-271M through -102M)  
 Temperature Rise  
 ..... 30 °C max. at rated Irms  
 Packaging ..... 1000 pcs. per reel

## Product Dimensions

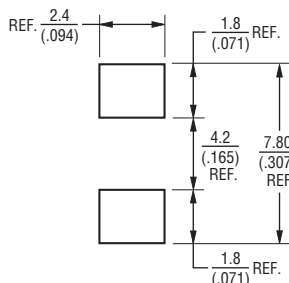


DIMENSIONS:  $\frac{\text{MM}}{(\text{INCHES})}$

## Schematic



## Recommended Layout



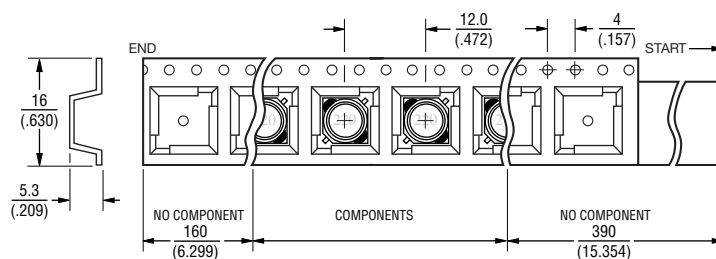
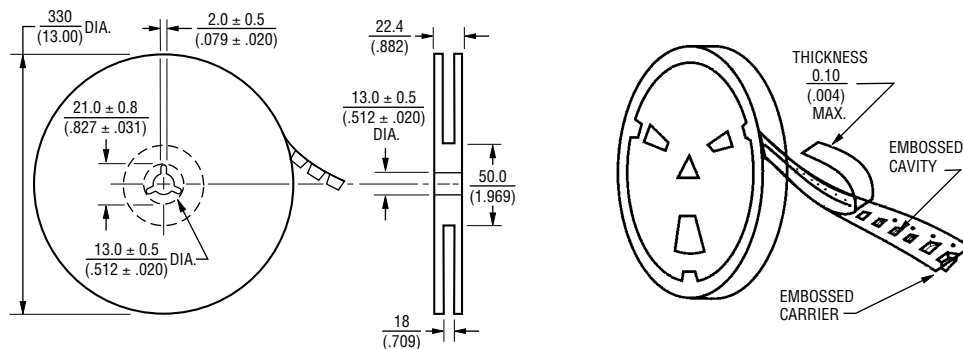
**WARNING Cancer and Reproductive Harm**  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

\*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.  
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# SRR7045 Series - Shielded SMD Power Inductors

**BOURNS®**

## Packaging Specifications



USER DIRECTION OF FEED

QTY: 1000 PCS. PER REEL

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

**BOURNS®**

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REV. 03/18

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Users should verify actual device performance in their specific applications.

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- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
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