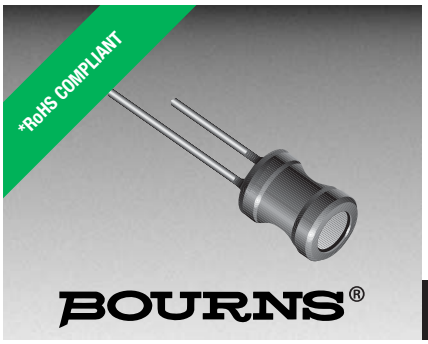



## Features

- Available in E12 series
- Inductance range: 1.0 µH to 47 mH
- RoHS compliant*

## Applications

- Power supplies
- DC/DC converters
- General use

# RLB9012 Radial Inductor

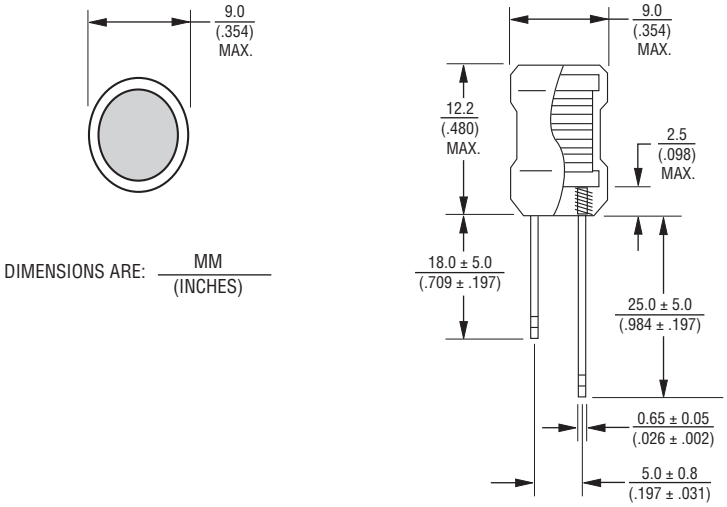
### General Specifications

Inductance Drop at Rated Current (IDC)..... 5 %
Operating Temperature ..... -55 °C to +125 °C
Storage Temperature ..... -55 °C to +105 °C

### Materials

Core Material..... Ferrite DR core
Wire..... Enameled copper wire
Terminal .....Cu/AG/Sn
Tube ..... Shrinkable tube 125 °C, 600 V

### Product Dimensions

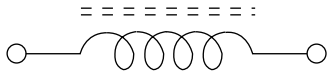



### Additional Information

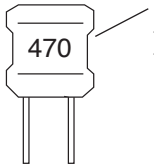
Click these links for more information:

PRODUCT | TECHNICAL LIBRARY | INVENTORY | SAMPLES | CONTACT

### Electrical Schematic



### Typical Part Marking




Inductance Code:
- First two digits are significant
- Third digit represents the number of zeroes to follow

### Electrical Characteristics

| BOURNS Part No. | Inductance (µH) @ 1 kHz | Q ref. | QTest freq. (MHz) | SRF (MHz) min. | RDC (ohms) max. | IDC (A) max. |
|---|---|---|---|---|---|---|
| RLB9012-1R0ML | 1.0 ± 20 % | 20 | 7.96 | 150.00 | 0.013 | 10.0 |
| RLB9012-1R5ML | 1.5 ± 20 % | 20 | 7.96 | 100.00 | 0.016 | 8.50 |
| RLB9012-2R2ML | 2.2 ± 20 % | 20 | 7.96 | 90.00 | 0.021 | 6.50 |
| RLB9012-3R3ML | 3.3 ± 20 % | 20 | 7.96 | 65.00 | 0.025 | 5.50 |
| RLB9012-4R7ML | 4.7 ± 20 % | 20 | 7.96 | 51.00 | 0.030 | 4.60 |
| RLB9012-6R8ML | 6.8 ± 20 % | 20 | 7.96 | 29.00 | 0.035 | 4.10 |
| RLB9012-100KL | 10.0 ± 10 % | 50 | 2.52 | 14.00 | 0.045 | 3.40 |
| RLB9012-120KL | 12.0 ± 10 % | 50 | 2.52 | 13.00 | 0.050 | 3.10 |
| RLB9012-150KL | 15.0 ± 10 % | 50 | 2.52 | 12.00 | 0.056 | 2.90 |
| RLB9012-180KL | 18.0 ± 10 % | 40 | 2.52 | 11.00 | 0.061 | 2.66 |
| RLB9012-220KL | 22.0 ± 10 % | 40 | 2.52 | 9.20 | 0.070 | 2.40 |
| RLB9012-270KL | 27.0 ± 10 % | 40 | 2.52 | 8.50 | 0.080 | 2.22 |
| RLB9012-330KL | 33.0 ± 10 % | 30 | 2.52 | 7.80 | 0.090 | 2.05 |
| RLB9012-390KL | 39.0 ± 10 % | 30 | 2.52 | 6.90 | 0.100 | 1.85 |
| RLB9012-470KL | 47.0 ± 10 % | 30 | 2.52 | 6.50 | 0.160 | 1.77 |
| RLB9012-560KL | 56.0 ± 10 % | 30 | 2.52 | 5.40 | 0.180 | 1.48 |

Packaging: 200 pieces per tray

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

*RoHS Directive 2015/863, Mar 31, 2015 and Annex.
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## Electrical Characteristics (Continued)

| BOURNS Part No. | Inductance (µH) @ 1 kHz | Q ref. | Q Test freq. (MHz) / Q | SRF (MHz) min. | RDC (ohms) max. | IDC (A) max. |
|---|---|---|---|---|---|---|
| RLB9012-680KL | 68.0 ± 10 % | 30 | 2.52 | 4.90 | 0.210 | 1.36 |
| RLB9012-820KL | 82.0 ± 10 % | 30 | 2.52 | 4.10 | 0.230 | 1.30 |
| RLB9012-101KL | 100.0 ± 10 % | 20 | 0.796 | 3.70 | 0.280 | 1.40 |
| RLB9012-121KL | 120.0 ± 10 % | 20 | 0.796 | 3.40 | 0.320 | 1.25 |
| RLB9012-151KL | 150.0 ± 10 % | 20 | 0.796 | 3.20 | 0.370 | 1.15 |
| RLB9012-181KL | 180.0 ± 10 % | 20 | 0.796 | 2.80 | 0.580 | 1.08 |
| RLB9012-221KL | 220.0 ± 10 % | 20 | 0.796 | 2.70 | 0.650 | 1.00 |
| RLB9012-271KL | 270.0 ± 10 % | 20 | 0.796 | 2.40 | 0.750 | 0.90 |
| RLB9012-331KL | 330.0 ± 10 % | 20 | 0.796 | 2.30 | 0.850 | 0.78 |
| RLB9012-391KL | 390.0 ± 10 % | 20 | 0.796 | 2.10 | 1.000 | 0.74 |
| RLB9012-471KL | 470.0 ± 10 % | 20 | 0.796 | 1.90 | 1.100 | 0.68 |
| RLB9012-561KL | 560.0 ± 10 % | 20 | 0.796 | 1.80 | 1.400 | 0.64 |
| RLB9012-681KL | 680.0 ± 10 % | 20 | 0.796 | 1.60 | 1.600 | 0.59 |
| RLB9012-821KL | 820.0 ± 10 % | 20 | 0.796 | 1.50 | 1.800 | 0.56 |
| RLB9012-102KL | 1000.0 ± 10 % | 20 | 0.252 | 1.30 | 2.900 | 0.51 |
| RLB9012-122KL | 1200.0 ± 10 % | 15 | 0.252 | 1.20 | 3.400 | 0.48 |
| RLB9012-152KL | 1500.0 ± 10 % | 15 | 0.252 | 1.10 | 3.800 | 0.43 |
| RLB9012-182KL | 1800.0 ± 10 % | 15 | 0.252 | 1.00 | 5.300 | 0.39 |
| RLB9012-222KL | 2200.0 ± 10 % | 15 | 0.252 | 0.80 | 5.900 | 0.36 |
| RLB9012-272KL | 2700.0 ± 10 % | 15 | 0.252 | 0.70 | 8.200 | 0.32 |
| RLB9012-332KL | 3300.0 ± 10 % | 15 | 0.252 | 0.60 | 9.100 | 0.29 |
| RLB9012-392KL | 3900.0 ± 10 % | 15 | 0.252 | 0.55 | 9.900 | 0.27 |
| RLB9012-472KL | 4700.0 ± 10 % | 15 | 0.252 | 0.50 | 13.60 | 0.24 |
| RLB9012-562KL | 5600.0 ± 10 % | 15 | 0.252 | 0.45 | 14.90 | 0.22 |
| RLB9012-682KL | 6800.0 ± 10 % | 15 | 0.252 | 0.40 | 20.70 | 0.20 |
| RLB9012-822KL | 8200.0 ± 10 % | 15 | 0.252 | 0.35 | 22.70 | 0.18 |
| RLB9012-103KL | 10,000 ± 10 % | 15 | 0.079 | 0.32 | 25.10 | 0.17 |
| RLB9012-123KL | 12,000 ± 10 % | 15 | 0.079 | 0.28 | 34.70 | 0.15 |
| RLB9012-153KL | 15,000 ± 10 % | 15 | 0.079 | 0.25 | 48.90 | 0.14 |
| RLB9012-183KL | 18,000 ± 10 % | 15 | 0.079 | 0.23 | 53.60 | 0.12 |
| RLB9012-223KL | 22,000 ± 10 % | 15 | 0.079 | 0.21 | 59.30 | 0.11 |
| RLB9012-273KL | 27,000 ± 10 % | 15 | 0.079 | 0.19 | 82.70 | 0.10 |
| RLB9012-333KL | 33,000 ± 10 % | 15 | 0.079 | 0.17 | 91.50 | 0.09 |
| RLB9012-393KL | 39,000 ± 10 % | 15 | 0.079 | 0.15 | 125.50 | 0.08 |
| RLB9012-473KL | 47,000 ± 10 % | 15 | 0.079 | 0.12 | 137.80 | 0.08 |

Packaging: 200 pieces per tray

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