

## Features

- Four types available
- High rated current for high current circuits
- Available in E12 series
- RoHS compliant\*

## Applications

- Power supplies
- DC/DC converters
- General use

# RLB Series Radial Inductors

### General Specifications

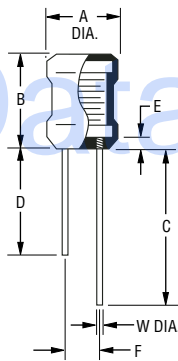
|                             |                             |
|-----------------------------|-----------------------------|
| Temperature Rise .....      | 20 °C max. at rated current |
| Operating Temperature ..... | -20 °C to +80 °C            |
| Storage Temperature .....   | -25 °C to +85 °C            |

### Materials

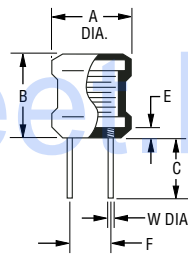
|                     |                               |
|---------------------|-------------------------------|
| Core Material ..... | Ferrite DR core               |
| Wire .....          | Enameled copper wire          |
| Terminal .....      | Cu/Sn                         |
| Tube .....        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

### Product Dimensions

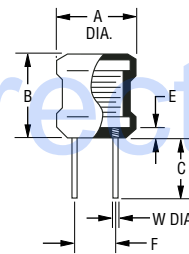
RLB0608, RLB0812, RLB1014,  
RLB0712, RLB0914 Series



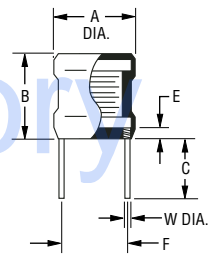
RLB0912 Series



RLB1314-680K  
thru RLB1314-153K



RLB1314-3R3M  
thru RLB1314-470K



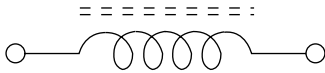
| Series  | A                                      | B   | C                                       | D                                      | E                            | F                                     | W (DIA.)              | Inductance Range           |
|---------|--|---|---|--|------------------------------|---------------------------------------|-----------------------|----------------------------|
| RLB0608 | $\frac{5.0 \pm 0.5}{(.197 \pm .020)}$  | $\frac{6.5 +1.0/-0.5}{(.256 +.039/- .020)}$ | $\frac{28.0 \pm 5.0}{(1.102 \pm .197)}$ | $\frac{20.0 \pm 5.0}{(.787 \pm .197)}$ | $\frac{2.5 + 0}{(.098 + 0)}$ | $\frac{2.0 \pm 0.5}{(.079 \pm .020)}$ | $\frac{0.50}{(.020)}$ | 1.0 $\mu$ H — 1000 $\mu$ H |
| RLB0812 | $\frac{6.7 \pm 0.5}{(.264 \pm .020)}$  | $\frac{10.0 \pm 1.0}{(.394 \pm .039)}$      | $\frac{25.0 \pm 5.0}{(.984 \pm .197)}$  | $\frac{18.0 \pm 5.0}{(.709 \pm .197)}$ | $\frac{2.5 + 0}{(.098 + 0)}$ | $\frac{3.0 \pm 0.5}{(.118 \pm .020)}$ | $\frac{0.65}{(.026)}$ | 47 $\mu$ H — 47 mH         |
| RLB1014 | $\frac{8.7 \pm 0.5}{(.343 \pm .020)}$  | $\frac{12.0 \pm 1.0}{(.472 \pm .039)}$      | $\frac{25.0 \pm 5.0}{(.984 \pm .197)}$  | $\frac{18.0 \pm 5.0}{(.709 \pm .197)}$ | $\frac{2.5 + 0}{(.098 + 0)}$ | $\frac{5.0 \pm 0.8}{(.197 \pm .031)}$ | $\frac{0.65}{(.026)}$ | 100 $\mu$ H — 82 mH        |
| RLB0712 | $\frac{6.7 \pm 0.5}{(.264 \pm .020)}$  | $\frac{10.0 \pm 1.0}{(.394 \pm .039)}$      | $\frac{25.0 \pm 5.0}{(.984 \pm .197)}$  | $\frac{18.0 \pm 5.0}{(.709 \pm .197)}$ | $\frac{2.5 + 0}{(.098 + 0)}$ | $\frac{3.0 \pm 0.5}{(.118 \pm .020)}$ | $\frac{0.65}{(.026)}$ | 10 $\mu$ H — 560 $\mu$ H   |
| RLB0912 | $\frac{8.7 \pm 0.5}{(.343 \pm .020)}$  | $\frac{10.0 \pm 1.0}{(.394 \pm .039)}$      | $\frac{5.0 \pm 1.0}{(.197 \pm .039)}$   | —                                      | $\frac{2.5 + 0}{(.098 + 0)}$ | $\frac{5.0 \pm 0.8}{(.197 \pm .031)}$ | $\frac{0.65}{(.026)}$ | 1.5 $\mu$ H — 1000 $\mu$ H |
| RLB0914 | $\frac{8.7 \pm 0.5}{(.343 \pm .020)}$  | $\frac{12.0 \pm 1.0}{(.472 \pm .039)}$      | $\frac{25.0 \pm 5.0}{(.984 \pm .197)}$  | $\frac{18.0 \pm 5.0}{(.709 \pm .197)}$ | $\frac{2.5 + 0}{(.098 + 0)}$ | $\frac{5.0 \pm 0.8}{(.197 \pm .031)}$ | $\frac{0.65}{(.026)}$ | 3.3 $\mu$ H — 1000 $\mu$ H |
| RLB1314 | $\frac{11.7 \pm 0.8}{(.461 \pm .031)}$ | $\frac{12.0 \pm 1.0}{(.472 \pm .039)}$      | $\frac{15.0 \pm 5.0}{(.591 \pm .197)}$  | —                                      | $\frac{2.5 + 0}{(.098 + 0)}$ | $\frac{9.0 \pm 1.0}{(.354 \pm .039)}$ | Per Specs.            | 3.3 $\mu$ H — 47 $\mu$ H   |
|         | $\frac{11.7 \pm 0.8}{(.461 \pm .031)}$ | $\frac{12.0 \pm 1.0}{(.472 \pm .039)}$      | $\frac{15.0 \pm 5.0}{(.591 \pm .197)}$  | —                                      | $\frac{2.5 + 0}{(.098 + 0)}$ | $\frac{7.0 \pm 0.8}{(.276 \pm .031)}$ | $\frac{0.80}{(.031)}$ | 68 $\mu$ H — 15 mH         |

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

\*RoHS Directive 2002/95/EC Jan 27 2003 including Annex  
Specifications are subject to change without notice.  
Customers should verify actual device performance in their specific applications.

# RLB Series Radial Inductors

## Electrical Schematic



## Typical Part Marking



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

## RLB0608 Series Electrical Characteristics

| BOURNS Part No. | Inductance (μH) | Q ref. | Test freq. (MHz) |  | SRF (MHz) min. | RDC (ohms) max. | IDC (mA) max. |
|-----------------|-----------------|--------|------------------|--|----------------|-----------------|---------------|
|                 |                 |        | L, Q             |  |                |                 |               |
| RLB0608-1R0ML   | 1.0 ± 20 %      | 60     | 7.96             |  | 105.0          | 0.10            | 1030          |
| RLB0608-1R2ML   | 1.2 ± 20 %      | 60     | 7.96             |  | 90.0           | 0.15            | 980           |
| RLB0608-1R5ML   | 1.5 ± 20 %      | 60     | 7.96             |  | 75.0           | 0.20            | 920           |
| RLB0608-1R8ML   | 1.8 ± 20 %      | 60     | 7.96             |  | 70.0           | 0.22            | 880           |
| RLB0608-2R2ML   | 2.2 ± 20 %      | 60     | 7.96             |  | 65.0           | 0.24            | 830           |
| RLB0608-2R7ML   | 2.7 ± 20 %      | 60     | 7.96             |  | 60.0           | 0.27            | 790           |
| RLB0608-3R3ML   | 3.3 ± 20 %      | 60     | 7.96             |  | 50.0           | 0.30            | 750           |
| RLB0608-3R9ML   | 3.9 ± 20 %      | 60     | 7.96             |  | 45.0           | 0.30            | 720           |
| RLB0608-4R7ML   | 4.7 ± 20 %      | 60     | 7.96             |  | 40.0           | 0.35            | 670           |
| RLB0608-5R6KL   | 5.6 ± 10 %      | 60     | 7.96             |  | 35.0           | 0.35            | 640           |
| RLB0608-6R8KL   | 6.8 ± 10 %      | 60     | 7.96             |  | 30.0           | 0.40            | 620           |
| RLB0608-8R2KL   | 8.2 ± 10 %      | 60     | 7.96             |  | 25.0           | 0.40            | 590           |
| RLB0608-100KL   | 10.0 ± 10 %     | 60     | 2.52             |  | 20.0           | 0.45            | 550           |
| RLB0608-120KL   | 12.0 ± 10 %     | 60     | 2.52             |  | 15.0           | 0.50            | 530           |
| RLB0608-150KL   | 15.0 ± 10 %     | 60     | 2.52             |  | 13.0           | 0.55            | 500           |
| RLB0608-180KL   | 18.0 ± 10 %     | 60     | 2.52             |  | 11.0           | 0.60            | 480           |
| RLB0608-220KL   | 22.0 ± 10 %     | 60     | 2.52             |  | 10.0           | 0.65            | 460           |
| RLB0608-270KL   | 27.0 ± 10 %     | 50     | 2.52             |  | 9.0            | 0.75            | 430           |
| RLB0608-330KL   | 33.0 ± 10 %     | 50     | 2.52             |  | 8.0            | 0.85            | 410           |
| RLB0608-390KL   | 39.0 ± 10 %     | 50     | 2.52             |  | 7.5            | 0.90            | 390           |
| RLB0608-470KL   | 47.0 ± 10 %     | 50     | 2.52             |  | 7.0            | 1.00            | 370           |
| RLB0608-560KL   | 56.0 ± 10 %     | 50     | 2.52             |  | 6.5            | 1.20            | 350           |
| RLB0608-680KL   | 68.0 ± 10 %     | 50     | 2.52             |  | 6.0            | 1.30            | 340           |
| RLB0608-820KL   | 82.0 ± 10 %     | 50     | 2.52             |  | 5.5            | 1.50            | 320           |
| RLB0608-101KL   | 100.0 ± 10 %    | 50     | 0.796            |  | 5.0            | 1.70            | 305           |
| RLB0608-121KL   | 120.0 ± 10 %    | 50     | 0.796            |  | 4.8            | 1.90            | 290           |
| RLB0608-151KL   | 150.0 ± 10 %    | 50     | 0.796            |  | 4.4            | 2.10            | 275           |
| RLB0608-181KL   | 180.0 ± 10 %    | 50     | 0.796            |  | 4.2            | 2.30            | 235           |
| RLB0608-221KL   | 220.0 ± 10 %    | 45     | 0.796            |  | 3.8            | 2.50            | 200           |
| RLB0608-271KL   | 270.0 ± 10 %    | 45     | 0.796            |  | 3.6            | 2.75            | 180           |
| RLB0608-331KL   | 330.0 ± 10 %    | 45     | 0.796            |  | 3.3            | 4.68            | 165           |
| RLB0608-391KL   | 390.0 ± 10 %    | 45     | 0.796            |  | 3.0            | 6.00            | 150           |
| RLB0608-471KL   | 470.0 ± 10 %    | 55     | 0.796            |  | 2.8            | 6.50            | 140           |
| RLB0608-561KL   | 560.0 ± 10 %    | 55     | 0.796            |  | 2.4            | 8.50            | 135           |
| RLB0608-681KL   | 680.0 ± 10 %    | 55     | 0.796            |  | 2.2            | 9.00            | 125           |
| RLB0608-821KL   | 820.0 ± 10 %    | 55     | 0.796            |  | 2.0            | 9.60            | 120           |
| RLB0608-102KL   | 1000.0 ± 10 %   | 55     | 0.252            |  | 1.8            | 11.50           | 100           |

Packaging: 800 pieces per bag

Specifications are subject to change without notice.  
Customers should verify actual device performance in their specific applications.

# RLB Series Radial Inductors

## RLB0812 Series Electrical Characteristics

| BOURNS Part No. | Inductance<br>( $\mu$ H) | Q<br>ref. | Test freq. (MHz)<br>L, Q | SRF<br>(MHz) min. | RDC<br>(ohms) max. | IDC<br>(mA) max. |
|-----------------|--------------------------|-----------|--------------------------|-------------------|--------------------|------------------|
| RLB0812-470KL   | 47 $\pm$ 10 %            | 30        | 2.52                     | 6.00              | 0.40               | 450              |
| RLB0812-560KL   | 56 $\pm$ 10 %            | 30        | 2.52                     | 5.50              | 0.45               | 400              |
| RLB0812-680KL   | 68 $\pm$ 10 %            | 30        | 2.52                     | 5.00              | 0.50               | 360              |
| RLB0812-820KL   | 82 $\pm$ 10 %            | 30        | 2.52                     | 4.50              | 0.50               | 340              |
| RLB0812-101KL   | 100 $\pm$ 10 %           | 45        | 0.796                    | 4.20              | 0.60               | 320              |
| RLB0812-121KL   | 120 $\pm$ 10 %           | 45        | 0.796                    | 3.60              | 0.70               | 300              |
| RLB0812-151KL   | 150 $\pm$ 10 %           | 45        | 0.796                    | 3.40              | 0.90               | 280              |
| RLB0812-181KL   | 180 $\pm$ 10 %           | 45        | 0.796                    | 3.20              | 1.00               | 260              |
| RLB0812-221KL   | 220 $\pm$ 10 %           | 45        | 0.796                    | 3.00              | 1.20               | 240              |
| RLB0812-271KL   | 270 $\pm$ 10 %           | 45        | 0.796                    | 2.80              | 1.40               | 220              |
| RLB0812-331KL   | 330 $\pm$ 10 %           | 45        | 0.796                    | 2.50              | 1.60               | 200              |
| RLB0812-391KL   | 390 $\pm$ 10 %           | 45        | 0.796                    | 2.30              | 1.80               | 180              |
| RLB0812-471KL   | 470 $\pm$ 10 %           | 45        | 0.796                    | 2.20              | 2.00               | 160              |
| RLB0812-561KL   | 560 $\pm$ 10 %           | 45        | 0.796                    | 2.00              | 2.50               | 150              |
| RLB0812-681KL   | 680 $\pm$ 10 %           | 45        | 0.796                    | 1.70              | 2.90               | 140              |
| RLB0812-821KL   | 820 $\pm$ 10 %           | 45        | 0.796                    | 1.50              | 3.10               | 130              |
| RLB0812-102KL   | 1000 $\pm$ 10 %          | 45        | 0.252                    | 1.40              | 3.90               | 120              |
| RLB0812-122KL   | 1200 $\pm$ 10 %          | 60        | 0.252                    | 1.10              | 4.40               | 110              |
| RLB0812-152KL   | 1500 $\pm$ 10 %          | 60        | 0.252                    | 0.90              | 6.00               | 100              |
| RLB0812-182KL   | 1800 $\pm$ 10 %          | 60        | 0.252                    | 0.80              | 7.00               | 90               |
| RLB0812-222KL   | 2200 $\pm$ 10 %          | 60        | 0.252                    | 0.75              | 8.00               | 80               |
| RLB0812-272KL   | 2700 $\pm$ 10 %          | 60        | 0.252                    | 0.70              | 9.00               | 70               |
| RLB0812-332KL   | 3300 $\pm$ 10 %          | 60        | 0.252                    | 0.60              | 12.00              | 60               |
| RLB0812-392KL   | 3900 $\pm$ 10 %          | 60        | 0.252                    | 0.55              | 14.00              | 55               |
| RLB0812-472KL   | 4700 $\pm$ 10 %          | 60        | 0.252                    | 0.50              | 16.00              | 50               |
| RLB0812-562KL   | 5600 $\pm$ 10 %          | 60        | 0.252                    | 0.48              | 18.00              | 45               |
| RLB0812-682KL   | 6800 $\pm$ 10 %          | 60        | 0.252                    | 0.44              | 24.00              | 40               |
| RLB0812-822KL   | 8200 $\pm$ 10 %          | 60        | 0.252                    | 0.40              | 30.00              | 36               |
| RLB0812-103KL   | 10000 $\pm$ 10 %         | 60        | 0.0796                   | 0.36              | 39.00              | 34               |
| RLB0812-123KL   | 12000 $\pm$ 10 %         | 60        | 0.0796                   | 0.32              | 46.00              | 32               |
| RLB0812-153KL   | 15000 $\pm$ 10 %         | 60        | 0.0796                   | 0.30              | 54.00              | 30               |
| RLB0812-183KL   | 18000 $\pm$ 10 %         | 60        | 0.0796                   | 0.28              | 76.00              | 27               |
| RLB0812-223KL   | 22000 $\pm$ 10 %         | 60        | 0.0796                   | 0.24              | 92.00              | 25               |
| RLB0812-273KL   | 27000 $\pm$ 10 %         | 60        | 0.0796                   | 0.20              | 102.00             | 22               |
| RLB0812-333KL   | 33000 $\pm$ 10 %         | 60        | 0.0796                   | 0.16              | 140.00             | 20               |
| RLB0812-393KL   | 39000 $\pm$ 10 %         | 60        | 0.0796                   | 0.13              | 150.00             | 18               |
| RLB0812-473KL   | 47000 $\pm$ 10 %         | 60        | 0.0796                   | 0.10              | 162.00             | 16               |

Packaging: 400 pieces per bag

# RLB Series Radial Inductors

## RLB1014 Series Electrical Characteristics

| BOURNS Part No. | Inductance<br>( $\mu$ H) | Q<br>ref. | Test freq. (KHz)<br>L, Q | SRF<br>(MHz) min. | RDC<br>(ohms) max. | IDC<br>(mA) max. |
|-----------------|--------------------------|-----------|--------------------------|-------------------|--------------------|------------------|
| RLB1014-101KL   | 100 $\pm$ 10 %           | 45        | 796.0                    | 3.20              | 0.85               | 350              |
| RLB1014-121KL   | 120 $\pm$ 10 %           | 45        | 796.0                    | 3.00              | 0.95               | 330              |
| RLB1014-151KL   | 150 $\pm$ 10 %           | 45        | 796.0                    | 2.80              | 1.05               | 310              |
| RLB1014-181KL   | 180 $\pm$ 10 %           | 45        | 796.0                    | 2.50              | 1.15               | 300              |
| RLB1014-221KL   | 220 $\pm$ 10 %           | 40        | 796.0                    | 2.10              | 1.30               | 280              |
| RLB1014-271KL   | 270 $\pm$ 10 %           | 40        | 796.0                    | 2.00              | 1.50               | 260              |
| RLB1014-331KL   | 330 $\pm$ 10 %           | 40        | 796.0                    | 1.95              | 1.70               | 240              |
| RLB1014-391KL   | 390 $\pm$ 10 %           | 40        | 796.0                    | 1.85              | 1.85               | 230              |
| RLB1014-471KL   | 470 $\pm$ 10 %           | 35        | 796.0                    | 1.55              | 2.30               | 210              |
| RLB1014-561KL   | 560 $\pm$ 10 %           | 35        | 796.0                    | 1.30              | 2.55               | 200              |
| RLB1014-681KL   | 680 $\pm$ 10 %           | 35        | 796.0                    | 1.15              | 2.85               | 190              |
| RLB1014-821KL   | 820 $\pm$ 10 %           | 35        | 796.0                    | 1.00              | 3.10               | 180              |
| RLB1014-102KL   | 1000 $\pm$ 10 %          | 50        | 252.0                    | 0.90              | 4.10               | 160              |
| RLB1014-122KL   | 1200 $\pm$ 10 %          | 50        | 252.0                    | 0.80              | 4.70               | 150              |
| RLB1014-152KL   | 1500 $\pm$ 10 %          | 50        | 252.0                    | 0.70              | 5.80               | 130              |
| RLB1014-182KL   | 1800 $\pm$ 10 %          | 50        | 252.0                    | 0.60              | 7.40               | 115              |
| RLB1014-222KL   | 2200 $\pm$ 10 %          | 50        | 252.0                    | 0.55              | 8.40               | 110              |
| RLB1014-272KL   | 2700 $\pm$ 10 %          | 50        | 252.0                    | 0.50              | 9.60               | 95               |
| RLB1014-332KL   | 3300 $\pm$ 10 %          | 50        | 252.0                    | 0.45              | 10.50              | 80               |
| RLB1014-392KL   | 3900 $\pm$ 10 %          | 50        | 252.0                    | 0.40              | 12.00              | 70               |
| RLB1014-472KL   | 4700 $\pm$ 10 %          | 45        | 252.0                    | 0.38              | 14.00              | 65               |
| RLB1014-562KL   | 5600 $\pm$ 10 %          | 45        | 252.0                    | 0.36              | 16.00              | 60               |
| RLB1014-682KL   | 6800 $\pm$ 10 %          | 40        | 252.0                    | 0.34              | 18.00              | 55               |
| RLB1014-822KL   | 8200 $\pm$ 10 %          | 40        | 252.0                    | 0.32              | 24.50              | 50               |
| RLB1014-103KL   | 10000 $\pm$ 10 %         | 50        | 79.6                     | 0.30              | 32.00              | 45               |
| RLB1014-123KL   | 12000 $\pm$ 10 %         | 50        | 79.6                     | 0.28              | 36.00              | 40               |
| RLB1014-153KL   | 15000 $\pm$ 10 %         | 50        | 79.6                     | 0.26              | 48.00              | 35               |
| RLB1014-183KL   | 18000 $\pm$ 10 %         | 45        | 79.6                     | 0.24              | 52.00              | 30               |
| RLB1014-223KL   | 22000 $\pm$ 10 %         | 45        | 79.6                     | 0.22              | 58.00              | 28               |
| RLB1014-273KL   | 27000 $\pm$ 10 %         | 45        | 79.6                     | 0.20              | 62.00              | 26               |
| RLB1014-333KL   | 33000 $\pm$ 10 %         | 45        | 79.6                     | 0.18              | 90.00              | 24               |
| RLB1014-393KL   | 39000 $\pm$ 10 %         | 40        | 79.6                     | 0.17              | 100.00             | 22               |
| RLB1014-473KL   | 47000 $\pm$ 10 %         | 35        | 79.6                     | 0.16              | 150.00             | 20               |
| RLB1014-563KL   | 56000 $\pm$ 10 %         | 35        | 79.6                     | 0.15              | 200.00             | 18               |
| RLB1014-683KL   | 68000 $\pm$ 10 %         | 35        | 79.6                     | 0.14              | 220.00             | 16               |
| RLB1014-823KL   | 82000 $\pm$ 10 %         | 30        | 79.6                     | 0.12              | 240.00             | 14               |

Packaging: 150 pieces per bag

# RLB Series Radial Inductors

## RLB0712 Series Electrical Characteristics

| BOURNS Part No. | Inductance ( $\mu$ H) | Q ref. | Test freq. (Hz) |         | SRF (MHz) min. | RDC (ohms) max. | IDC (mA) max. |
|-----------------|-----------------------|--------|-----------------|---------|----------------|-----------------|---------------|
|                 |                       |        | L               | Q       |                |                 |               |
| RLB0712-100KL   | 10 $\pm$ 10 %         | 20     | 1 k             | 2.520 M | 16.0           | 0.07            | 1100          |
| RLB0712-120KL   | 12 $\pm$ 10 %         | 20     | 1 k             | 2.520 M | 12.0           | 0.08            | 1000          |
| RLB0712-150KL   | 15 $\pm$ 10 %         | 20     | 1 k             | 2.520 M | 10.0           | 0.09            | 900           |
| RLB0712-180KL   | 18 $\pm$ 10 %         | 20     | 1 k             | 2.520 M | 10.0           | 0.10            | 750           |
| RLB0712-220KL   | 22 $\pm$ 10 %         | 20     | 1 k             | 2.520 M | 9.0            | 0.12            | 700           |
| RLB0712-270KL   | 27 $\pm$ 10 %         | 20     | 1 k             | 2.520 M | 8.0            | 0.13            | 650           |
| RLB0712-330KL   | 33 $\pm$ 10 %         | 20     | 1 k             | 2.520 M | 7.0            | 0.15            | 600           |
| RLB0712-390KL   | 39 $\pm$ 10 %         | 20     | 1 k             | 2.520 M | 6.0            | 0.16            | 550           |
| RLB0712-470KL   | 47 $\pm$ 10 %         | 20     | 1 k             | 2.520 M | 6.0            | 0.18            | 450           |
| RLB0712-560KL   | 56 $\pm$ 10 %         | 20     | 1 k             | 2.520 M | 5.0            | 0.21            | 400           |
| RLB0712-680KL   | 68 $\pm$ 10 %         | 20     | 1 k             | 2.520 M | 5.0            | 0.24            | 360           |
| RLB0712-820KL   | 82 $\pm$ 10 %         | 20     | 1 k             | 2.520 M | 5.0            | 0.35            | 340           |
| RLB0712-101KL   | 100 $\pm$ 10 %        | 20     | 1 k             | 0.796 M | 4.0            | 0.40            | 320           |
| RLB0712-121KL   | 120 $\pm$ 10 %        | 20     | 1 k             | 0.796 M | 4.0            | 0.45            | 300           |
| RLB0712-151KL   | 150 $\pm$ 10 %        | 20     | 1 k             | 0.796 M | 3.5            | 0.50            | 280           |
| RLB0712-181KL   | 180 $\pm$ 10 %        | 20     | 1 k             | 0.796 M | 3.0            | 0.75            | 260           |
| RLB0712-221KL   | 220 $\pm$ 10 %        | 20     | 1 k             | 0.796 M | 3.0            | 0.90            | 240           |
| RLB0712-271KL   | 270 $\pm$ 10 %        | 20     | 1 k             | 0.796 M | 2.5            | 1.00            | 220           |
| RLB0712-331KL   | 330 $\pm$ 10 %        | 20     | 1 k             | 0.796 M | 2.5            | 1.10            | 200           |
| RLB0712-391KL   | 390 $\pm$ 10 %        | 20     | 1 k             | 0.796 M | 2.0            | 1.20            | 180           |
| RLB0712-471KL   | 470 $\pm$ 10 %        | 20     | 1 k             | 0.796 M | 2.0            | 1.50            | 160           |
| RLB0712-561KL   | 560 $\pm$ 10 %        | 20     | 1 k             | 0.796 M | 2.0            | 1.80            | 150           |

Packaging: 400 pieces per bag

## RLB0912 Series Electrical Characteristics

| BOURNS Part No. | Inductance ( $\mu$ H) | Q ref. | Test freq. (Hz) |         | SRF (MHz) min. | RDC (ohms) max. | IDC (A) max. |
|-----------------|-----------------------|--------|-----------------|---------|----------------|-----------------|--------------|
|                 |                       |        | L               | Q       |                |                 |              |
| RLB0912-1R5ML   | 1.5 $\pm$ 20 %        | 30     | 1 k             | 7.960 M | 78.0           | 0.008           | 5.4          |
| RLB0912-2R2ML   | 2.2 $\pm$ 20 %        | 30     | 1 k             | 7.960 M | 63.0           | 0.010           | 4.5          |
| RLB0912-3R3ML   | 3.3 $\pm$ 20 %        | 30     | 1 k             | 7.960 M | 50.0           | 0.018           | 3.6          |
| RLB0912-4R7ML   | 4.7 $\pm$ 20 %        | 30     | 1 k             | 7.960 M | 41.0           | 0.022           | 3.1          |
| RLB0912-6R8ML   | 6.8 $\pm$ 20 %        | 30     | 1 k             | 7.960 M | 33.0           | 0.028           | 2.5          |
| RLB0912-100KL   | 10.0 $\pm$ 10 %       | 60     | 1 k             | 2.520 M | 27.0           | 0.043           | 2.1          |
| RLB0912-150KL   | 15.0 $\pm$ 10 %       | 50     | 1 k             | 2.520 M | 21.0           | 0.056           | 1.7          |
| RLB0912-220KL   | 22.0 $\pm$ 10 %       | 50     | 1 k             | 2.520 M | 17.0           | 0.086           | 1.4          |
| RLB0912-330KL   | 33.0 $\pm$ 10 %       | 45     | 1 k             | 2.520 M | 13.0           | 0.140           | 1.1          |
| RLB0912-470KL   | 47.0 $\pm$ 10 %       | 40     | 1 k             | 2.520 M | 11.0           | 0.170           | 0.96         |
| RLB0912-680KL   | 68.0 $\pm$ 10 %       | 35     | 1 k             | 2.520 M | 9.0            | 0.280           | 0.79         |
| RLB0912-101KL   | 100.0 $\pm$ 10 %      | 55     | 1 k             | 0.796 M | 7.2            | 0.330           | 0.66         |
| RLB0912-151KL   | 150.0 $\pm$ 10 %      | 40     | 1 k             | 0.796 M | 5.7            | 0.560           | 0.53         |
| RLB0912-221KL   | 220.0 $\pm$ 10 %      | 30     | 1 k             | 0.796 M | 4.5            | 0.720           | 0.44         |
| RLB0912-331KL   | 330.0 $\pm$ 10 %      | 25     | 1 k             | 0.796 M | 3.6            | 1.100           | 0.36         |
| RLB0912-471KL   | 470.0 $\pm$ 10 %      | 25     | 1 k             | 0.796 M | 2.9            | 1.700           | 0.30         |
| RLB0912-681KL   | 680.0 $\pm$ 10 %      | 25     | 1 k             | 0.796 M | 2.3            | 2.300           | 0.25         |
| RLB0912-102KL   | 1000.0 $\pm$ 10 %     | 55     | 1 k             | 0.252 M | 1.9            | 4.300           | 0.20         |

Packaging: 300 pieces per bag; available in ammo-pak (use Model RLH0912) - 1000 pieces per box

Specifications are subject to change without notice.  
Customers should verify actual device performance in their specific applications.

# RLB Series Radial Inductors

## RLB0914 Series Electrical Characteristics

| BOURNS Part No. | Inductance<br>( $\mu$ H) | Q<br>ref. | Test freq. (MHz)<br>L, Q | SRF<br>(MHz) min. | RDC<br>(ohms) max. | IDC<br>(A) max. |
|-----------------|--------------------------|-----------|--------------------------|-------------------|--------------------|-----------------|
| RLB0914-3R3ML   | 3.3 $\pm$ 20 %           | 20        | 7.960                    | 70.0              | 0.027              | 3.60            |
| RLB0914-4R7ML   | 4.7 $\pm$ 20 %           | 20        | 7.960                    | 50.0              | 0.033              | 3.20            |
| RLB0914-6R8ML   | 6.8 $\pm$ 20 %           | 20        | 7.960                    | 30.0              | 0.039              | 3.00            |
| RLB0914-100KL   | 10.0 $\pm$ 10 %          | 50        | 2.520                    | 20.0              | 0.048              | 2.70            |
| RLB0914-120KL   | 12.0 $\pm$ 10 %          | 50        | 2.520                    | 15.0              | 0.055              | 2.50            |
| RLB0914-150KL   | 15.0 $\pm$ 10 %          | 50        | 2.520                    | 10.0              | 0.060              | 2.40            |
| RLB0914-180KL   | 18.0 $\pm$ 10 %          | 40        | 2.520                    | 9.5               | 0.065              | 2.30            |
| RLB0914-220KL   | 22.0 $\pm$ 10 %          | 40        | 2.520                    | 9.0               | 0.090              | 1.90            |
| RLB0914-270KL   | 27.0 $\pm$ 10 %          | 40        | 2.520                    | 8.5               | 0.110              | 1.80            |
| RLB0914-330KL   | 33.0 $\pm$ 10 %          | 40        | 2.520                    | 8.0               | 0.120              | 1.70            |
| RLB0914-390KL   | 39.0 $\pm$ 10 %          | 30        | 2.520                    | 7.0               | 0.130              | 1.60            |
| RLB0914-470KL   | 47.0 $\pm$ 10 %          | 30        | 2.520                    | 6.0               | 0.140              | 1.50            |
| RLB0914-560KL   | 56.0 $\pm$ 10 %          | 30        | 2.520                    | 5.0               | 0.200              | 1.30            |
| RLB0914-680KL   | 68.0 $\pm$ 10 %          | 30        | 2.520                    | 4.5               | 0.210              | 1.20            |
| RLB0914-820KL   | 82.0 $\pm$ 10 %          | 30        | 2.520                    | 4.0               | 0.230              | 1.10            |
| RLB0914-101KL   | 100.0 $\pm$ 10 %         | 30        | 0.796                    | 3.5               | 0.280              | 1.00            |
| RLB0914-121KL   | 120.0 $\pm$ 10 %         | 30        | 0.796                    | 3.0               | 0.320              | 0.90            |
| RLB0914-151KL   | 150.0 $\pm$ 10 %         | 30        | 0.796                    | 2.8               | 0.370              | 0.80            |
| RLB0914-181KL   | 180.0 $\pm$ 10 %         | 30        | 0.796                    | 2.6               | 0.540              | 0.75            |
| RLB0914-221KL   | 220.0 $\pm$ 10 %         | 20        | 0.796                    | 2.4               | 0.600              | 0.70            |
| RLB0914-271KL   | 270.0 $\pm$ 10 %         | 20        | 0.796                    | 2.2               | 0.680              | 0.65            |
| RLB0914-331KL   | 330.0 $\pm$ 10 %         | 20        | 0.796                    | 2.0               | 0.760              | 0.60            |
| RLB0914-391KL   | 390.0 $\pm$ 10 %         | 20        | 0.796                    | 1.9               | 0.850              | 0.55            |
| RLB0914-471KL   | 470.0 $\pm$ 10 %         | 20        | 0.796                    | 1.8               | 1.300              | 0.50            |
| RLB0914-561KL   | 560.0 $\pm$ 10 %         | 20        | 0.796                    | 1.7               | 1.400              | 0.45            |
| RLB0914-681KL   | 680.0 $\pm$ 10 %         | 20        | 0.796                    | 1.6               | 1.600              | 0.40            |
| RLB0914-821KL   | 820.0 $\pm$ 10 %         | 20        | 0.796                    | 1.5               | 1.800              | 0.35            |
| RLB0914-102KL   | 1000.0 $\pm$ 10 %        | 40        | 0.252                    | 1.3               | 2.100              | 0.30            |

Packaging: 200 pieces per bag

# RLB Series Radial Inductors

## RLB1314 Series Electrical Characteristics

| BOURNS Part No. | Inductance<br>( $\mu$ H) | Q<br>Ref. | Test freq. (Hz) |        | SRF<br>(MHz) Typ. | RDC<br>(ohms) max. | IDC<br>(A) max. | W Dia.                                 | F                                     |
|-----------------|--------------------------|-----------|-----------------|--------|-------------------|--------------------|-----------------|--|---------------------------------------|
|                 |                          |           | L               | Q      |                   |                    |                 |  |                                       |
| RLB1314-3R3ML   | 3.3 $\pm$ 20 %           | 90        | 1 k             | 7.96 M | 59.00             | 0.008              | 5.600           | $\frac{0.8 \pm 0.05}{(.032 \pm .002)}$ | $\frac{9.0 \pm 1.0}{(.354 \pm .04)}$  |
| RLB1314-4R7ML   | 4.7 $\pm$ 20 %           | 100       | 1 k             | 7.96 M | 45.00             | 0.009              | 4.700           | $\frac{0.8 \pm 0.05}{(.032 \pm .002)}$ | $\frac{9.0 \pm 1.0}{(.354 \pm .04)}$  |
| RLB1314-6R8ML   | 6.8 $\pm$ 20 %           | 80        | 1 k             | 7.96 M | 34.00             | 0.012              | 3.900           | $\frac{0.7 \pm 0.05}{(.028 \pm .002)}$ | $\frac{9.0 \pm 1.0}{(.354 \pm .04)}$  |
| RLB1314-100ML   | 10.0 $\pm$ 20 %          | 140       | 1 k             | 2.52 M | 26.00             | 0.015              | 3.200           | $\frac{0.7 \pm 0.05}{(.028 \pm .002)}$ | $\frac{9.0 \pm 1.0}{(.354 \pm .04)}$  |
| RLB1314-150ML   | 15.0 $\pm$ 20 %          | 120       | 1 k             | 2.52 M | 19.00             | 0.019              | 2.600           | $\frac{0.7 \pm 0.05}{(.028 \pm .002)}$ | $\frac{9.0 \pm 1.0}{(.354 \pm .04)}$  |
| RLB1314- 220KL  | 22.0 $\pm$ 10 %          | 110       | 1 k             | 2.52 M | 14.00             | 0.026              | 2.200           | $\frac{0.7 \pm 0.05}{(.028 \pm .002)}$ | $\frac{9.0 \pm 1.0}{(.354 \pm .04)}$  |
| RLB1314-330KL   | 33.0 $\pm$ 10 %          | 100       | 1 k             | 2.52 M | 10.00             | 0.045              | 1.800           | $\frac{0.6 \pm 0.05}{(.024 \pm .002)}$ | $\frac{9.0 \pm 1.0}{(.354 \pm .04)}$  |
| RLB1314-470KL   | 47.0 $\pm$ 10 %          | 90        | 1 k             | 2.52 M | 8.30              | 0.056              | 1.500           | $\frac{0.6 \pm 0.05}{(.024 \pm .002)}$ | $\frac{9.0 \pm 1.0}{(.354 \pm .04)}$  |
| RLB1314-680KL   | 68.0 $\pm$ 10 %          | 80        | 1 k             | 2.52 M | 6.70              | 0.092              | 1.200           | $\frac{0.8 \pm 0.05}{(.032 \pm .002)}$ | $\frac{7.0 \pm 0.8}{(.276 \pm .032)}$ |
| RLB1314-101KL   | 100.0 $\pm$ 10 %         | 70        | 1 k             | 796 K  | 5.40              | 0.120              | 1.000           | $\frac{0.8 \pm 0.05}{(.032 \pm .002)}$ | $\frac{7.0 \pm 0.8}{(.276 \pm .032)}$ |
| RLB1314-151KL   | 150.0 $\pm$ 10 %         | 70        | 1 k             | 796 K  | 4.30              | 0.200              | 0.820           | $\frac{0.8 \pm 0.05}{(.032 \pm .002)}$ | $\frac{7.0 \pm 0.8}{(.276 \pm .032)}$ |
| RLB1314-221KL   | 220.0 $\pm$ 10 %         | 40        | 1 k             | 796 K  | 3.40              | 0.250              | 0.680           | $\frac{0.8 \pm 0.05}{(.032 \pm .002)}$ | $\frac{7.0 \pm 0.8}{(.276 \pm .032)}$ |
| RLB1314-331KL   | 330.0 $\pm$ 10 %         | 40        | 1 k             | 796 K  | 2.70              | 0.420              | 0.550           | $\frac{0.8 \pm 0.05}{(.032 \pm .002)}$ | $\frac{7.0 \pm 0.8}{(.276 \pm .032)}$ |
| RLB1314-471KL   | 470.0 $\pm$ 10 %         | 30        | 1 k             | 796 K  | 2.30              | 0.510              | 0.460           | $\frac{0.8 \pm 0.05}{(.032 \pm .002)}$ | $\frac{7.0 \pm 0.8}{(.276 \pm .032)}$ |
| RLB1314-681KL   | 680.0 $\pm$ 10 %         | 30        | 1 k             | 796 K  | 1.90              | 0.790              | 0.380           | $\frac{0.8 \pm 0.05}{(.032 \pm .002)}$ | $\frac{7.0 \pm 0.8}{(.276 \pm .032)}$ |
| RLB1314-102KL   | 1000.0 $\pm$ 10 %        | 40        | 1 k             | 252 K  | 1.60              | 1.300              | 0.310           | $\frac{0.8 \pm 0.05}{(.032 \pm .002)}$ | $\frac{7.0 \pm 0.8}{(.276 \pm .032)}$ |
| RLB1314-152KL   | 1500.0 $\pm$ 10 %        | 30        | 1 k             | 252 K  | 1.30              | 1.700              | 0.250           | $\frac{0.8 \pm 0.05}{(.032 \pm .002)}$ | $\frac{7.0 \pm 0.8}{(.276 \pm .032)}$ |
| RLB1314-222KL   | 2200.0 $\pm$ 10 %        | 60        | 1 k             | 252 K  | 1.10              | 2.900              | 0.210           | $\frac{0.8 \pm 0.05}{(.032 \pm .002)}$ | $\frac{7.0 \pm 0.8}{(.276 \pm .032)}$ |
| RLB1314-332KL   | 3300.0 $\pm$ 10 %        | 50        | 1 k             | 252 K  | 0.90              | 3.700              | 0.170           | $\frac{0.8 \pm 0.05}{(.032 \pm .002)}$ | $\frac{7.0 \pm 0.8}{(.276 \pm .032)}$ |
| RLB1314-472KL   | 4700.0 $\pm$ 10 %        | 50        | 1 k             | 252 K  | 0.76              | 5.600              | 0.140           | $\frac{0.8 \pm 0.05}{(.032 \pm .002)}$ | $\frac{7.0 \pm 0.8}{(.276 \pm .032)}$ |
| RLB1314-682KL   | 6800.0 $\pm$ 10 %        | 60        | 1 k             | 252 K  | 0.65              | 9.400              | 0.120           | $\frac{0.8 \pm 0.05}{(.032 \pm .002)}$ | $\frac{7.0 \pm 0.8}{(.276 \pm .032)}$ |
| RLB1314-103KL   | 10000.0 $\pm$ 10 %       | 80        | 1 k             | 79.6 K | 0.53              | 12.000             | 0.100           | $\frac{0.8 \pm 0.05}{(.032 \pm .002)}$ | $\frac{7.0 \pm 0.8}{(.276 \pm .032)}$ |
| RLB1314-153KL   | 15000.0 $\pm$ 10 %       | 70        | 1 k             | 79.6 K | 0.41              | 15.000             | 0.082           | $\frac{0.8 \pm 0.05}{(.032 \pm .002)}$ | $\frac{7.0 \pm 0.8}{(.276 \pm .032)}$ |

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

Packaging: RLB1314 (3R3M to 470K) = 150 pieces per bag; RLB1314 (680K to 153K) = 130 pieces per bag.

REV. 05/05

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