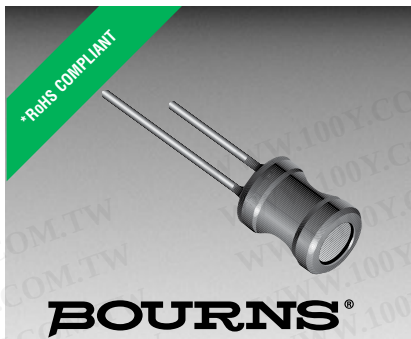




## Features

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

## Applications

- Power supplies
- DC/DC converters
- General use

**BOURNS®**

## RLB Series Radial Lead Inductors

### General Specifications

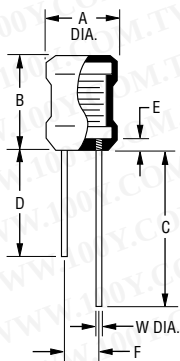
Operating Temperature.....-40 °C to +105 °C  
Storage Temperature.....-40 °C to +105 °C

### Materials

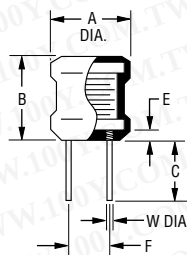
Core Material.....Ferrite DR core  
Wire.....Enamelled copper wire  
Terminal.....Cu/Sn  
Tube.....Shrinkable tube 125 °C, 600 V

### Product Dimensions

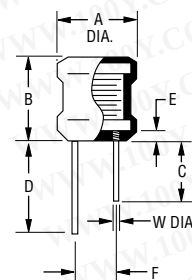
RLB0608, RLB0812, RLB1014,  
RLB0712, RLB0914 Series



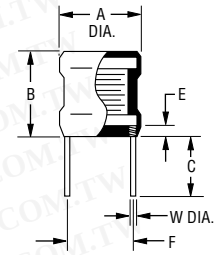
RLB0912 Series



RLB1314-680K  
through  
RLB1314-153K



RLB1314-3R3M  
through  
RLB1314-470K



| Series  | A                                      | B                                                  | C                                       | D                                      | E                                | F                                     | W (DIA.)               | Inductance Range           |
|---------|----------------------------------------|----------------------------------------------------|-----------------------------------------|----------------------------------------|----------------------------------|---------------------------------------|------------------------|----------------------------|
| RLB0608 | $\frac{5.0 \pm 0.5}{(.197 \pm .020)}$  | $\frac{6.5 \pm 1.0 / 0.5}{(.256 \pm .039 / .020)}$ | $\frac{28.0 \pm 5.0}{(1.102 \pm .197)}$ | $\frac{20.0 \pm 5.0}{(.787 \pm .197)}$ | $\frac{2.5 \pm 0}{(.098 \pm 0)}$ | $\frac{2.0 \pm 0.5}{(.079 \pm .020)}$ | $\frac{0.50}{(.020)}$  | 1.0 $\mu$ H - 2200 $\mu$ H |
| RLB0812 | $\frac{6.7 \pm 0.5}{(.264 \pm .020)}$  | $\frac{10.0 \pm 1.0}{(.394 \pm .039)}$             | $\frac{25.0 \pm 5.0}{(.984 \pm .197)}$  | $\frac{18.0 \pm 5.0}{(.709 \pm .197)}$ | $\frac{2.5 \pm 0}{(.098 \pm 0)}$ | $\frac{3.0 \pm 0.5}{(.118 \pm .020)}$ | $\frac{0.65}{(.026)}$  | 47 $\mu$ H - 47 mH         |
| RLB1014 | $\frac{8.7 \pm 0.5}{(.343 \pm .020)}$  | $\frac{12.0 \pm 1.0}{(.472 \pm .039)}$             | $\frac{25.0 \pm 5.0}{(.984 \pm .197)}$  | $\frac{18.0 \pm 5.0}{(.709 \pm .197)}$ | $\frac{2.5 \pm 0}{(.098 \pm 0)}$ | $\frac{5.0 \pm 0.8}{(.197 \pm .031)}$ | $\frac{0.65}{(.026)}$  | 100 $\mu$ H - 82 mH        |
| RLB0712 | $\frac{6.7 \pm 0.5}{(.264 \pm .020)}$  | $\frac{10.0 \pm 1.0}{(.394 \pm .039)}$             | $\frac{25.0 \pm 5.0}{(.984 \pm .197)}$  | $\frac{18.0 \pm 5.0}{(.709 \pm .197)}$ | $\frac{2.5 \pm 0}{(.098 \pm 0)}$ | $\frac{3.0 \pm 0.5}{(.118 \pm .020)}$ | $\frac{0.65}{(.026)}$  | 10 $\mu$ H - 560 $\mu$ H   |
| RLB0912 | $\frac{8.7 \pm 0.5}{(.343 \pm .020)}$  | $\frac{10.0 \pm 1.0}{(.394 \pm .039)}$             | $\frac{5.0 \pm 1.0}{(.197 \pm .039)}$   | —                                      | $\frac{2.5 \pm 0}{(.098 \pm 0)}$ | $\frac{5.0 \pm 0.8}{(.197 \pm .031)}$ | $\frac{0.65}{(.026)}$  | 1.5 $\mu$ H - 1000 $\mu$ H |
| RLB0914 | $\frac{8.7 \pm 0.5}{(.343 \pm .020)}$  | $\frac{12.0 \pm 1.0}{(.472 \pm .039)}$             | $\frac{25.0 \pm 5.0}{(.984 \pm .197)}$  | $\frac{18.0 \pm 5.0}{(.709 \pm .197)}$ | $\frac{2.5 \pm 0}{(.098 \pm 0)}$ | $\frac{5.0 \pm 0.8}{(.197 \pm .031)}$ | $\frac{0.65}{(.026)}$  | 3.3 $\mu$ H - 1000 $\mu$ H |
| RLB1314 | $\frac{11.7 \pm 0.8}{(.461 \pm .031)}$ | $\frac{12.0 \pm 1.0}{(.472 \pm .039)}$             | $\frac{15.0 \pm 3.0}{(.591 \pm .118)}$  | —                                      | $\frac{2.5 \pm 0}{(.098 \pm 0)}$ | $\frac{9.0 \pm 1.0}{(.354 \pm .039)}$ | Per Specs.<br>(Page 7) | 3.3 $\mu$ H - 47 $\mu$ H   |
|         | $\frac{11.7 \pm 0.8}{(.461 \pm .031)}$ | $\frac{12.0 \pm 1.0}{(.472 \pm .039)}$             | $\frac{15.0 \pm 3.0}{(.591 \pm .118)}$  | $\frac{18.0 \pm 3.0}{(.709 \pm .128)}$ | $\frac{2.5 \pm 0}{(.098 \pm 0)}$ | $\frac{7.0 \pm 0.8}{(.276 \pm .031)}$ | $\frac{0.80}{(.031)}$  | 68 $\mu$ H - 15 mH         |

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

勝特力材料 886-3-5753170  
勝特力电子(上海) 86-21-34970699  
勝特力电子(深圳) 86-755-83298787  
[Http://www.100y.com.tw](http://www.100y.com.tw)

\* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

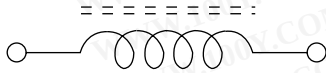
Specifications are subject to change without notice.

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Users should verify actual device performance in their specific applications.

# RLB Series Radial Lead Inductors

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## Electrical Schematic



## Typical Part Marking



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

## Electrical Characteristics - RLB0608 Series

NOTE: Temperature rise..... 20 °C max. at rated current

| Bourns Part Number | Inductance (μH) | Q Ref. | Test Freq. (MHz)<br>L, Q | SRF (MHz) Min. | RDC (Ω) Max. | IDC (mA) Max. |
|--------------------|-----------------|--------|--------------------------|----------------|--------------|---------------|
| 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           |
| RLB0608-152KL      | 1500.0 ± 10 %   | 50     | 0.252                    | 1.4            | 15.00        | 100           |
| RLB0608-222KL      | 2200.0 ± 10 %   | 50     | 0.252                    | 1.0            | 20.00        | 85            |

Packaging: 800 pieces per bag.

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## RLB Series Radial Lead Inductors

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### Electrical Characteristics - RLB0812 Series

NOTE: Temperature rise..... 20 °C max. at rated current

| Bourns Part Number | Inductance (μH) | Q Ref. | Test Freq. (MHz)<br>L, Q | SRF (MHz) Min. | RDC (Ω) Max. | IDC (mA) Max. |
|--------------------|-----------------|--------|--------------------------|----------------|--------------|---------------|
| RLB0812-470KL      | 47 ± 10 %       | 30     | 2.52                     | 6.00           | 0.40         | 450           |
| RLB0812-560KL      | 56 ± 10 %       | 30     | 2.52                     | 5.50           | 0.45         | 400           |
| RLB0812-680KL      | 68 ± 10 %       | 30     | 2.52                     | 5.00           | 0.50         | 360           |
| RLB0812-820KL      | 82 ± 10 %       | 30     | 2.52                     | 4.50           | 0.50         | 340           |
| RLB0812-101KL      | 100 ± 10 %      | 45     | 0.796                    | 4.20           | 0.60         | 320           |
| RLB0812-121KL      | 120 ± 10 %      | 45     | 0.796                    | 3.60           | 0.70         | 300           |
| RLB0812-151KL      | 150 ± 10 %      | 45     | 0.796                    | 3.40           | 0.90         | 280           |
| RLB0812-181KL      | 180 ± 10 %      | 45     | 0.796                    | 3.20           | 1.00         | 260           |
| RLB0812-221KL      | 220 ± 10 %      | 45     | 0.796                    | 3.00           | 1.20         | 240           |
| RLB0812-271KL      | 270 ± 10 %      | 45     | 0.796                    | 2.80           | 1.40         | 220           |
| RLB0812-331KL      | 330 ± 10 %      | 45     | 0.796                    | 2.50           | 1.60         | 200           |
| RLB0812-391KL      | 390 ± 10 %      | 45     | 0.796                    | 2.30           | 1.80         | 180           |
| RLB0812-471KL      | 470 ± 10 %      | 45     | 0.796                    | 2.20           | 2.00         | 160           |
| RLB0812-561KL      | 560 ± 10 %      | 45     | 0.796                    | 2.00           | 2.50         | 150           |
| RLB0812-681KL      | 680 ± 10 %      | 45     | 0.796                    | 1.70           | 2.90         | 140           |
| RLB0812-821KL      | 820 ± 10 %      | 45     | 0.796                    | 1.50           | 3.10         | 130           |
| RLB0812-102KL      | 1000 ± 10 %     | 45     | 0.252                    | 1.40           | 3.90         | 120           |
| RLB0812-122KL      | 1200 ± 10 %     | 60     | 0.252                    | 1.10           | 4.40         | 110           |
| RLB0812-152KL      | 1500 ± 10 %     | 60     | 0.252                    | 0.90           | 6.00         | 100           |
| RLB0812-182KL      | 1800 ± 10 %     | 60     | 0.252                    | 0.80           | 7.00         | 90            |
| RLB0812-222KL      | 2200 ± 10 %     | 60     | 0.252                    | 0.75           | 8.00         | 80            |
| RLB0812-272KL      | 2700 ± 10 %     | 60     | 0.252                    | 0.70           | 9.00         | 70            |
| RLB0812-332KL      | 3300 ± 10 %     | 60     | 0.252                    | 0.60           | 12.00        | 60            |
| RLB0812-392KL      | 3900 ± 10 %     | 60     | 0.252                    | 0.55           | 14.00        | 55            |
| RLB0812-472KL      | 4700 ± 10 %     | 60     | 0.252                    | 0.50           | 16.00        | 50            |
| RLB0812-562KL      | 5600 ± 10 %     | 60     | 0.252                    | 0.48           | 18.00        | 45            |
| RLB0812-682KL      | 6800 ± 10 %     | 60     | 0.252                    | 0.44           | 24.00        | 40            |
| RLB0812-822KL      | 8200 ± 10 %     | 60     | 0.252                    | 0.40           | 30.00        | 36            |
| RLB0812-103KL      | 10000 ± 10 %    | 60     | 0.0796                   | 0.36           | 39.00        | 34            |
| RLB0812-123KL      | 12000 ± 10 %    | 60     | 0.0796                   | 0.32           | 46.00        | 32            |
| RLB0812-153KL      | 15000 ± 10 %    | 60     | 0.0796                   | 0.30           | 54.00        | 30            |
| RLB0812-183KL      | 18000 ± 10 %    | 60     | 0.0796                   | 0.28           | 76.00        | 27            |
| RLB0812-223KL      | 22000 ± 10 %    | 60     | 0.0796                   | 0.24           | 92.00        | 25            |
| RLB0812-273KL      | 27000 ± 10 %    | 60     | 0.0796                   | 0.20           | 102.00       | 22            |
| RLB0812-333KL      | 33000 ± 10 %    | 60     | 0.0796                   | 0.16           | 140.00       | 20            |
| RLB0812-393KL      | 39000 ± 10 %    | 60     | 0.0796                   | 0.13           | 150.00       | 18            |
| RLB0812-473KL      | 47000 ± 10 %    | 60     | 0.0796                   | 0.10           | 162.00       | 16            |

Packaging: 400 pieces per bag.

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## RLB Series Radial Lead Inductors

**BOURNS®**

### Electrical Characteristics - RLB1014 Series

NOTE: Temperature rise..... 40 °C typ. at rated I<sub>rms</sub>  
Inductance drop..... 10 % typ at I<sub>sat</sub>

| Bourns Part Number | Inductance (μH) | Q Ref. | Test Freq. (MHz)<br>L, Q | SRF (MHz) Min. | RDC (Ω) Max. | I <sub>rms</sub> (A) Typ. | I <sub>sat</sub> (A) Typ. |
|--------------------|-----------------|--------|--------------------------|----------------|--------------|---------------------------|---------------------------|
| RLB1014-101KL      | 100 ± 10 %      | 45     | 796.0                    | 3.20           | 0.85         | 0.78                      | 2                         |
| RLB1014-121KL      | 120 ± 10 %      | 45     | 796.0                    | 3.00           | 0.95         | 0.74                      | 1.93                      |
| RLB1014-151KL      | 150 ± 10 %      | 45     | 796.0                    | 2.80           | 1.05         | 0.68                      | 1.8                       |
| RLB1014-181KL      | 180 ± 10 %      | 45     | 796.0                    | 2.50           | 1.15         | 0.65                      | 1.55                      |
| RLB1014-221KL      | 220 ± 10 %      | 40     | 796.0                    | 2.10           | 1.30         | 0.62                      | 1.45                      |
| RLB1014-271KL      | 270 ± 10 %      | 40     | 796.0                    | 2.00           | 1.50         | 0.6                       | 1.33                      |
| RLB1014-331KL      | 330 ± 10 %      | 40     | 796.0                    | 1.95           | 1.70         | 0.55                      | 1.18                      |
| RLB1014-391KL      | 390 ± 10 %      | 40     | 796.0                    | 1.85           | 1.85         | 0.5                       | 1.1                       |
| RLB1014-471KL      | 470 ± 10 %      | 35     | 796.0                    | 1.55           | 2.30         | 0.45                      | 1                         |
| RLB1014-561KL      | 560 ± 10 %      | 35     | 796.0                    | 1.30           | 2.55         | 0.43                      | 0.95                      |
| RLB1014-681KL      | 680 ± 10 %      | 35     | 796.0                    | 1.15           | 2.85         | 0.42                      | 0.85                      |
| RLB1014-821KL      | 820 ± 10 %      | 35     | 796.0                    | 1.00           | 3.10         | 0.4                       | 0.8                       |
| RLB1014-102KL      | 1000 ± 10 %     | 50     | 252.0                    | 0.90           | 4.10         | 0.36                      | 0.6                       |
| RLB1014-122KL      | 1200 ± 10 %     | 50     | 252.0                    | 0.80           | 4.70         | 0.34                      | 0.36                      |
| RLB1014-152KL      | 1500 ± 10 %     | 50     | 252.0                    | 0.70           | 5.80         | 0.3                       | 0.32                      |
| RLB1014-182KL      | 1800 ± 10 %     | 50     | 252.0                    | 0.60           | 7.40         | 0.28                      | 0.3                       |
| RLB1014-222KL      | 2200 ± 10 %     | 50     | 252.0                    | 0.55           | 8.40         | 0.26                      | 0.27                      |
| RLB1014-272KL      | 2700 ± 10 %     | 50     | 252.0                    | 0.50           | 9.60         | 0.24                      | 0.25                      |
| RLB1014-332KL      | 3300 ± 10 %     | 50     | 252.0                    | 0.45           | 10.50        | 0.22                      | 0.23                      |
| RLB1014-392KL      | 3900 ± 10 %     | 50     | 252.0                    | 0.40           | 12.00        | 0.21                      | 0.21                      |
| RLB1014-472KL      | 4700 ± 10 %     | 45     | 252.0                    | 0.38           | 14.00        | 0.19                      | 0.195                     |
| RLB1014-562KL      | 5600 ± 10 %     | 45     | 252.0                    | 0.36           | 16.00        | 0.17                      | 0.18                      |
| RLB1014-682KL      | 6800 ± 10 %     | 40     | 252.0                    | 0.34           | 18.00        | 0.16                      | 0.165                     |
| RLB1014-822KL      | 8200 ± 10 %     | 40     | 252.0                    | 0.32           | 24.50        | 0.15                      | 0.155                     |
| RLB1014-103KL      | 10000 ± 10 %    | 50     | 79.6                     | 0.30           | 32.00        | 0.135                     | 0.145                     |
| RLB1014-123KL      | 12000 ± 10 %    | 50     | 79.6                     | 0.28           | 36.00        | 0.125                     | 0.13                      |
| RLB1014-153KL      | 15000 ± 10 %    | 50     | 79.6                     | 0.26           | 48.00        | 0.1                       | 0.11                      |
| RLB1014-183KL      | 18000 ± 10 %    | 45     | 79.6                     | 0.24           | 52.00        | 0.096                     | 0.1                       |
| RLB1014-223KL      | 22000 ± 10 %    | 45     | 79.6                     | 0.22           | 58.00        | 0.092                     | 0.095                     |
| RLB1014-273KL      | 27000 ± 10 %    | 45     | 79.6                     | 0.20           | 62.00        | 0.082                     | 0.085                     |
| RLB1014-333KL      | 33000 ± 10 %    | 45     | 79.6                     | 0.18           | 90.00        | 0.074                     | 0.075                     |
| RLB1014-393KL      | 39000 ± 10 %    | 40     | 79.6                     | 0.17           | 100.00       | 0.07                      | 0.072                     |
| RLB1014-473KL      | 47000 ± 10 %    | 35     | 79.6                     | 0.16           | 150.00       | 0.06                      | 0.065                     |
| RLB1014-563KL      | 56000 ± 10 %    | 35     | 79.6                     | 0.15           | 200.00       | 0.052                     | 0.06                      |
| RLB1014-683KL      | 68000 ± 10 %    | 35     | 79.6                     | 0.14           | 220.00       | 0.046                     | 0.056                     |
| RLB1014-823KL      | 82000 ± 10 %    | 30     | 79.6                     | 0.12           | 240.00       | 0.044                     | 0.052                     |
| RLB1014-104KL      | 100000 ± 10 %   | 30     | L: 1 kHz, Q: 79.6 kHz    | 0.10           | 300.00       | 0.04                      | 0.04                      |

Packaging: 150 pieces per bag.

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# RLB Series Radial Lead Inductors

**BOURNS®**

## Electrical Characteristics - RLB0712 Series

NOTE: Temperature rise..... 20 °C max. at rated current

| Bourns Part Number | Inductance (μH) | Q Ref. | Test Freq. (Hz) |         | SRF (MHz) Min. | RDC (Ω) Max. | IDC (mA) Max. |
|--------------------|-----------------|--------|-----------------|---------|----------------|--------------|---------------|
|                    |                 |        | L               | Q       |                |              |               |
| RLB0712-100KL      | 10 ± 10 %       | 20     | 1 K             | 2.520 M | 16.0           | 0.07         | 1100          |
| RLB0712-120KL      | 12 ± 10 %       | 20     | 1 K             | 2.520 M | 12.0           | 0.08         | 1000          |
| RLB0712-150KL      | 15 ± 10 %       | 20     | 1 K             | 2.520 M | 10.0           | 0.09         | 900           |
| RLB0712-180KL      | 18 ± 10 %       | 20     | 1 K             | 2.520 M | 10.0           | 0.10         | 750           |
| RLB0712-220KL      | 22 ± 10 %       | 20     | 1 K             | 2.520 M | 9.0            | 0.12         | 700           |
| RLB0712-270KL      | 27 ± 10 %       | 20     | 1 K             | 2.520 M | 8.0            | 0.13         | 650           |
| RLB0712-330KL      | 33 ± 10 %       | 20     | 1 K             | 2.520 M | 7.0            | 0.15         | 600           |
| RLB0712-390KL      | 39 ± 10 %       | 20     | 1 K             | 2.520 M | 6.0            | 0.16         | 550           |
| RLB0712-470KL      | 47 ± 10 %       | 20     | 1 K             | 2.520 M | 6.0            | 0.18         | 450           |
| RLB0712-560KL      | 56 ± 10 %       | 20     | 1 K             | 2.520 M | 5.0            | 0.21         | 400           |
| RLB0712-680KL      | 68 ± 10 %       | 20     | 1 K             | 2.520 M | 5.0            | 0.24         | 360           |
| RLB0712-820KL      | 82 ± 10 %       | 20     | 1 K             | 2.520 M | 5.0            | 0.35         | 340           |
| RLB0712-101KL      | 100 ± 10 %      | 20     | 1 K             | 0.796 M | 4.0            | 0.40         | 320           |
| RLB0712-121KL      | 120 ± 10 %      | 20     | 1 K             | 0.796 M | 4.0            | 0.45         | 300           |
| RLB0712-151KL      | 150 ± 10 %      | 20     | 1 K             | 0.796 M | 3.5            | 0.50         | 280           |
| RLB0712-181KL      | 180 ± 10 %      | 20     | 1 K             | 0.796 M | 3.0            | 0.75         | 260           |
| RLB0712-221KL      | 220 ± 10 %      | 20     | 1 K             | 0.796 M | 3.0            | 0.90         | 240           |
| RLB0712-271KL      | 270 ± 10 %      | 20     | 1 K             | 0.796 M | 2.5            | 1.00         | 220           |
| RLB0712-331KL      | 330 ± 10 %      | 20     | 1 K             | 0.796 M | 2.5            | 1.10         | 200           |
| RLB0712-391KL      | 390 ± 10 %      | 20     | 1 K             | 0.796 M | 2.0            | 1.20         | 180           |
| RLB0712-471KL      | 470 ± 10 %      | 20     | 1 K             | 0.796 M | 2.0            | 1.50         | 160           |

Packaging: 400 pieces per bag.

## Electrical Characteristics - RLB0912 Series

NOTE: Temperature rise..... 40 °C typ. at rated I<sub>rms</sub>  
Inductance drop..... 10 % typ at I<sub>sat</sub>

| Bourns Part Number | Inductance (μH) | Q Ref. | Test Freq. (Hz) |         | SRF (MHz) Min. | RDC (Ω) Max. | I <sub>rms</sub> (A) Typ. | I <sub>sat</sub> (A) Typ. |
|--------------------|-----------------|--------|-----------------|---------|----------------|--------------|---------------------------|---------------------------|
|                    |                 |        | L               | Q       |                |              |                           |                           |
| RLB0912-1R0ML      | 1.0 ±20 %       | 30     | 1 K             | 7.960 M | 88.0           | 0.010        | 6                         | 8.1                       |
| RLB0912-1R5ML      | 1.5 ±20 %       | 30     | 1 K             | 7.960 M | 78.0           | 0.008        | 6                         | 8                         |
| RLB0912-2R2ML      | 2.2 ±20 %       | 30     | 1 K             | 7.960 M | 63.0           | 0.010        | 5.3                       | 7.5                       |
| RLB0912-3R3ML      | 3.3 ±20 %       | 30     | 1 K             | 7.960 M | 50.0           | 0.018        | 4.5                       | 6.5                       |
| RLB0912-4R7ML      | 4.7 ±20 %       | 30     | 1 K             | 7.960 M | 41.0           | 0.022        | 4                         | 5                         |
| RLB0912-6R8ML      | 6.8 ±20 %       | 30     | 1 K             | 7.960 M | 33.0           | 0.028        | 3.7                       | 4.3                       |
| RLB0912-100KL      | 10.0 ±10 %      | 60     | 1 K             | 2.520 M | 27.0           | 0.043        | 2.5                       | 3.6                       |
| RLB0912-150KL      | 15.0 ±10 %      | 50     | 1 K             | 2.520 M | 21.0           | 0.056        | 2.3                       | 3                         |
| RLB0912-220KL      | 22.0 ±10 %      | 50     | 1 K             | 2.520 M | 17.0           | 0.086        | 2.1                       | 2.5                       |
| RLB0912-330KL      | 33.0 ±10 %      | 45     | 1 K             | 2.520 M | 13.0           | 0.140        | 1.7                       | 2                         |
| RLB0912-470KL      | 47.0 ±10 %      | 40     | 1 K             | 2.520 M | 11.0           | 0.170        | 1.5                       | 1.7                       |
| RLB0912-680KL      | 68.0 ±10 %      | 35     | 1 K             | 2.520 M | 9.0            | 0.280        | 1.35                      | 1.5                       |
| RLB0912-101KL      | 100.0 ±10 %     | 55     | 1 K             | 0.796 M | 7.2            | 0.330        | 1                         | 1.2                       |
| RLB0912-151KL      | 150.0 ±10 %     | 40     | 1 K             | 0.796 M | 5.7            | 0.560        | 0.92                      | 1                         |
| RLB0912-221KL      | 220.0 ±10 %     | 30     | 1 K             | 0.796 M | 4.5            | 0.720        | 0.8                       | 0.8                       |
| RLB0912-331KL      | 330.0 ±10 %     | 25     | 1 K             | 0.796 M | 3.6            | 1.100        | 0.7                       | 0.62                      |
| RLB0912-471KL      | 470.0 ±10 %     | 25     | 1 K             | 0.796 M | 2.9            | 1.700        | 0.6                       | 0.52                      |
| RLB0912-681KL      | 680.0 ±10 %     | 25     | 1 K             | 0.796 M | 2.3            | 2.300        | 0.5                       | 0.42                      |
| RLB0912-102KL      | 1000.0 ±10 %    | 55     | 1 K             | 0.252 M | 1.9            | 4.300        | 0.4                       | 0.35                      |

Packaging: 200 pieces per bag; available in ammo-pak (use Model RLH0912) - 1000 pieces per box.

Specifications are subject to change without notice.

The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Users should verify actual device performance in their specific applications.

## RLB Series Radial Lead Inductors

**BOURNS®**

### Electrical Characteristics - RLB0914 Series

NOTE: Temperature rise..... 40 °C typ. at rated I<sub>rms</sub>  
Inductance drop..... 10 % typ at I<sub>sat</sub>

| Bourns Part Number | Inductance (μH) | Q Ref. | Test Freq. (MHz) L, Q | SRF (MHz) Min. | RDC (Ω) Max. | I <sub>rms</sub> (A) Typ. | I <sub>sat</sub> (A) Typ. |
|--------------------|-----------------|--------|-----------------------|----------------|--------------|---------------------------|---------------------------|
| RLB0914-3R3ML      | 3.3 ± 20 %      | 20     | 7.960                 | 70.0           | 0.027        | 3.6                       | 11.3                      |
| RLB0914-4R7ML      | 4.7 ± 20 %      | 20     | 7.960                 | 50.0           | 0.033        | 3.2                       | 10                        |
| RLB0914-6R8ML      | 6.8 ± 20 %      | 20     | 7.960                 | 30.0           | 0.039        | 3                         | 8.5                       |
| RLB0914-100KL      | 10.0 ± 10 %     | 50     | 2.520                 | 20.0           | 0.048        | 2.7                       | 6.7                       |
| RLB0914-120KL      | 12.0 ± 10 %     | 50     | 2.520                 | 15.0           | 0.055        | 2.5                       | 6.2                       |
| RLB0914-150KL      | 15.0 ± 10 %     | 50     | 2.520                 | 10.0           | 0.060        | 2.4                       | 5.3                       |
| RLB0914-180KL      | 18.0 ± 10 %     | 40     | 2.520                 | 9.5            | 0.065        | 2.3                       | 5                         |
| RLB0914-220KL      | 22.0 ± 10 %     | 40     | 2.520                 | 9.0            | 0.090        | 1.9                       | 4.5                       |
| RLB0914-270KL      | 27.0 ± 10 %     | 40     | 2.520                 | 8.5            | 0.110        | 1.8                       | 4                         |
| RLB0914-330KL      | 33.0 ± 10 %     | 40     | 2.520                 | 8.0            | 0.120        | 1.7                       | 3.8                       |
| RLB0914-390KL      | 39.0 ± 10 %     | 30     | 2.520                 | 7.0            | 0.130        | 1.6                       | 3.4                       |
| RLB0914-470KL      | 47.0 ± 10 %     | 30     | 2.520                 | 6.0            | 0.140        | 1.56                      | 3.2                       |
| RLB0914-560KL      | 56.0 ± 10 %     | 30     | 2.520                 | 5.0            | 0.200        | 1.5                       | 3                         |
| RLB0914-680KL      | 68.0 ± 10 %     | 30     | 2.520                 | 4.5            | 0.210        | 1.33                      | 2.7                       |
| RLB0914-820KL      | 82.0 ± 10 %     | 30     | 2.520                 | 4.0            | 0.230        | 1.28                      | 2.5                       |
| RLB0914-101KL      | 100.0 ± 10 %    | 30     | 0.796                 | 3.5            | 0.280        | 1.1                       | 2.1                       |
| RLB0914-121KL      | 120.0 ± 10 %    | 30     | 0.796                 | 3.0            | 0.320        | 1.05                      | 1.9                       |
| RLB0914-151KL      | 150.0 ± 10 %    | 30     | 0.796                 | 2.8            | 0.370        | 1                         | 1.8                       |
| RLB0914-181KL      | 180.0 ± 10 %    | 30     | 0.796                 | 2.6            | 0.540        | 0.87                      | 1.63                      |
| RLB0914-221KL      | 220.0 ± 10 %    | 20     | 0.796                 | 2.4            | 0.600        | 0.8                       | 1.5                       |
| RLB0914-271KL      | 270.0 ± 10 %    | 20     | 0.796                 | 2.2            | 0.680        | 0.77                      | 1.4                       |
| RLB0914-331KL      | 330.0 ± 10 %    | 20     | 0.796                 | 2.0            | 0.760        | 0.74                      | 1.25                      |
| RLB0914-391KL      | 390.0 ± 10 %    | 20     | 0.796                 | 1.9            | 0.850        | 0.7                       | 1.15                      |
| RLB0914-471KL      | 470.0 ± 10 %    | 20     | 0.796                 | 1.8            | 1.300        | 0.56                      | 1                         |
| RLB0914-561KL      | 560.0 ± 10 %    | 20     | 0.796                 | 1.7            | 1.400        | 0.52                      | 0.95                      |
| RLB0914-681KL      | 680.0 ± 10 %    | 20     | 0.796                 | 1.6            | 1.600        | 0.49                      | 0.9                       |
| RLB0914-821KL      | 820.0 ± 10 %    | 20     | 0.796                 | 1.5            | 1.800        | 0.46                      | 0.83                      |
| RLB0914-102KL      | 1000.0 ± 10 %   | 40     | 0.252                 | 1.3            | 2.100        | 0.42                      | 0.65                      |

Packaging: 200 pieces per bag

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## RLB Series Radial Lead Inductors

**BOURNS®**

### Electrical Characteristics - RLB1314 Series

NOTE: Temperature rise..... 20 °C max. at rated current

| Bourns<br>Part Number | Inductance<br>( $\mu$ H) | Q<br>Ref. | Test Freq. (Hz) |        | SRF<br>(MHz) Min. | RDC<br>( $\Omega$ ) Max. | IDC<br>(A) Max. | Dimensions                             |                                       |
|-----------------------|--------------------------|-----------|-----------------|--------|-------------------|--------------------------|-----------------|----------------------------------------|---------------------------------------|
|                       |                          |           | L               | Q      |                   |                          |                 | W Dia.                                 | F                                     |
| 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:  $\frac{\text{MM}}{(\text{INCHES})}$

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

REV. 03/17

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