

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 Lead Inductors

General Specifications

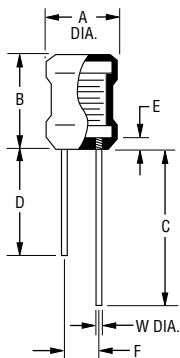
| | |
|---------------------------------|-------------------|
| Operating Temperature..... | -40 °C to +105 °C |
| Storage Temperature..... | -40 °C to +105 °C |
| Moisture Sensitivity Level..... | 1 |
| ESD Classification (HBM)..... | N/A |

Materials

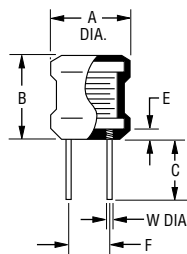
| | |
|--------------------|-------------------------------|
| Core Material..... | Ferrite DR core |
| Wire..... | Enameled copper wire |
| Terminal..... | Cu/Sn |
| Tube..... | Shrinkable tube 125 °C, 600 V |

Product Dimensions

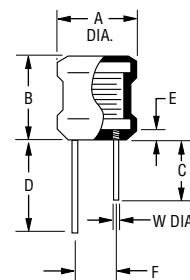
RLB0608, RLB0812, RLB1014,
RLB0712, RLB0914 Series



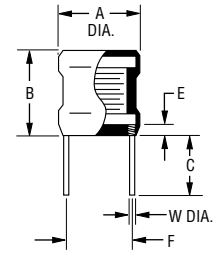
RLB0912 Series



RLB1314-680K
through
RLB1314-153K



RLB1314-3R3M
through
RLB1314-470K



| Series | A | B | C | D | E | F | W (DIA.) | Inductance Range |
|---------|--|---|---|--|------------------------------|---------------------------------------|------------------------|----------------------------|
| RLB0608 | $\frac{5.0 \pm 0.5}{(.197 \pm .020)}$ | $\frac{6.5 +1.0/ 0.5}{(.256 +.039/.020)}$ | $\frac{28.0 \pm 5.0}{(1.102 \pm .197)}$ | $\frac{20.0 \pm 5.0}{(.787 \pm .197)}$ | $\frac{2.5 + 0}{(.098 + 0)}$ | $\frac{2.0 \pm 0.5}{(.079 \pm .020)}$ | $\frac{0.50}{(.020)}$ | 1.0 μ H - 2200 μ 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 μ 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 μ 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 μ H - 560 μ 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 μ H - 1000 μ 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 μ H - 1000 μ H |
| RLB1314 | $\frac{11.7 \pm 0.8}{(.461 \pm .031)}$ | $\frac{12.0 \pm 1.0}{(.472 \pm .039)}$ | $\frac{15.0 \pm 3.0}{(.591 \pm .118)}$ | - | $\frac{2.5 + 0}{(.098 + 0)}$ | $\frac{9.0 \pm 1.0}{(.354 \pm .039)}$ | Per Specs. (Page 7) | 3.3 μ H - 47 μ H |
| | $\frac{11.7 \pm 0.8}{(.461 \pm .031)}$ | $\frac{12.0 \pm 1.0}{(.472 \pm .039)}$ | $\frac{15.0 \pm 3.0}{(.591 \pm .118)}$ | $\frac{18.0 \pm 3.0}{(.709 \pm .128)}$ | $\frac{2.5 + 0}{(.098 + 0)}$ | $\frac{7.0 \pm 0.8}{(.276 \pm .031)}$ | $\frac{0.80}{(.031)}$ | 68 μ H - 15 mH |

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

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

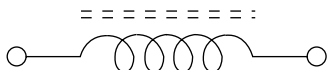
Specifications are subject to change without notice.

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 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) 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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Users should verify actual device performance in their specific applications.

RLB Series Radial Lead Inductors



Electrical Characteristics - RLB0812 Series

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

| Bourns Part Number | Inductance (μ H) | Q Ref. | Test Freq. (MHz) L, Q | SRF (MHz) Min. | RDC (Ω) Max. | IDC (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.

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RLB Series Radial Lead Inductors



Electrical Characteristics - RLB1014 Series

NOTE: Temperature rise..... 40 °C typ. at rated I_{rms}
 Inductance drop..... 10 % typ at I_{sat}

| Bourns Part Number | Inductance (μH) | Q Ref. | Test Freq. (MHz) L, Q | SRF (MHz) Min. | RDC (Ω) Max. | I _{rms} (A) Typ. | I _{sat} (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



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_{rms}
Inductance drop..... 10 % typ at I_{sat}

| Bourns Part Number | Inductance (µH) | Q Ref. | Test Freq. (Hz) | | SRF (MHz) Min. | RDC (Ω) Max. | I _{rms} (A) Typ. | I _{sat} (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.

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



Electrical Characteristics - RLB0914 Series

NOTE: Temperature rise..... 40 °C typ. at rated I_{rms}
 Inductance drop..... 10 % typ at I_{sat}

| Bourns Part Number | Inductance (μH) | Q Ref. | Test Freq. (MHz) L, Q | SRF (MHz) Min. | RDC (Ω) Max. | I _{rms} (A) Typ. | I _{sat} (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



Electrical Characteristics - RLB1314 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 (A) Max. | Dimensions | |
|--------------------|-----------------|--------|-----------------|--------|----------------|--------------|--------------|--|---------------------------------------|
| | | | L | Q | | | | W Dia. | F |
| RLB1314-3R3ML | 3.3 ± 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 ± 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 ± 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 ± 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 ± 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 ± 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 ± 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 ± 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 ± 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 ± 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 ± 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 ± 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 ± 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 ± 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 ± 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 ± 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 ± 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 ± 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 ± 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 ± 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 ± 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 ± 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 ± 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: $\frac{MM}{(INCHES)}$

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

REV. 08/17

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