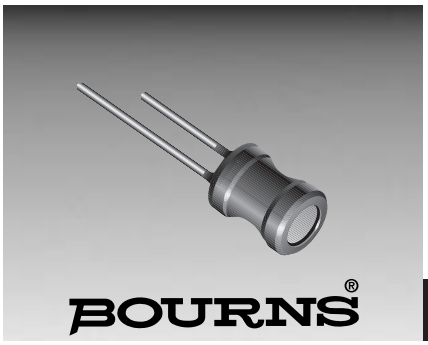


BOURNS®

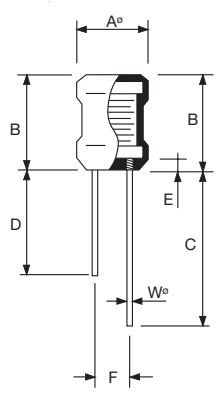
Features

- Four types available
- High rated current for high current circuits
- RLB0712 and RLB0912 can be tape and reel packaged for automated assembly
- Available in E12 series

RLB0712/RLB0912/RLB0914/RLB1314 Series Inductors

Configuration

RLB0712



A: $\frac{7.5^{+0}}{(.295^{+0})}$

B: $\frac{12.0^{+0}}{(.472^{+0})}$

C: $\frac{15.0^{+0}}{(.59^{+0})}$

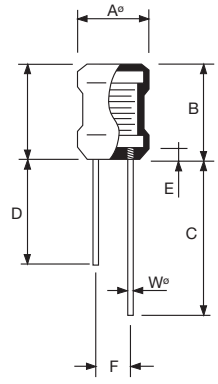
D: $\frac{10.0^{+0}}{(.394^{+0})}$

E: $\frac{3.0^{+0}}{(.118^{+0})}$

F: $\frac{3.0^{\pm0.8}}{(.118^{\pm0.032})}$ (BULK)

W: $\frac{0.65^{\pm0.05}}{(.026^{\pm0.002})}$

RLB0914



A: $\frac{9.0^{+1/-0.8}}{(.354^{+.039/-.031})}$ max.

B: $\frac{12.5^{+1/-1.5}}{(.492^{+.039/-.059})}$ max.

C: $\frac{25.0^{+1/-5}}{(.984^{+.039/-.197})}$ min.

D: $\frac{20.0^{+1/-5}}{(.787^{+.039/-.197})}$ min.

E: $\frac{3.0}{(.118)}$ max.

F: $\frac{5.0^{\pm0.08}}{(.197^{\pm0.032})}$

W: $\frac{0.65^{\pm0.05}}{(.026^{\pm0.002})}$

These radial lead fixed inductors are mainly used in applications for high current circuits.

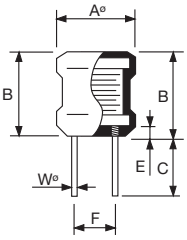
DIMENSIONS ARE: METRIC / (INCHES)

How to Order

RL B 09 12 - 100 K - T/R

- Radial lead type
- Tube cover, H = Housing for 0912 T/R
- Outside diameter
- Body height
- Inductance
- Tolerance: (K: ±10%, M: ±20%)
- Tape and reel

RLB0912



A: $\frac{9.5}{(.374)}$ max.

B: $\frac{12.0}{(.472)}$ max.

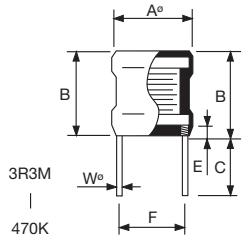
C: $\frac{5.0}{(.197)}$ min.

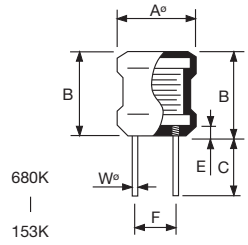
E: $\frac{3.0}{(.118)}$ max.

F: $\frac{5.0^{\pm0.08}}{(.197^{\pm0.003})}$ (BULK)

W: $\frac{0.65^{\pm0.05}}{(.026^{\pm0.002})}$ (TAPED)

RLB1314





A: $\frac{13}{(.512)}$ max.

B: $\frac{14.0}{(.551)}$ max.

C: $\frac{15.0^{\pm5.0}}{(.59^{\pm.197})}$ min.

E: $\frac{3.0}{(.118)}$ max.

F: } per electrical
W: } spec. sheet

RLB0712 Series Electrical Characteristics

BOURNS Part No.	Inductance (µH)	Q min.	Test freq. (Hz)		SRF (MHz) min.	RDC (Ω) max.	IDC (mA) max.
			L	Q			
RLB 0712 - 100K	10 ± 10%	20	1 k	2.520 M	16.0	0.07	1100
- 120K	12 ± 10%	20	1 k	2.520 M	12.0	0.08	1000
- 150K	15 ± 10%	20	1 k	2.520 M	10.0	0.09	900
- 180K	18 ± 10%	20	1 k	2.520 M	10.0	0.10	750
- 220K	22 ± 10%	20	1 k	2.520 M	9.0	0.12	700
- 270K	27 ± 10%	20	1 k	2.520 M	8.0	0.13	650
- 330K	33 ± 10%	20	1 k	2.520 M	7.0	0.15	600
- 390K	39 ± 10%	20	1 k	2.520 M	6.0	0.16	550
- 470K	47 ± 10%	20	1 k	2.520 M	6.0	0.18	450
- 560K	56 ± 10%	20	1 k	2.520 M	5.0	0.21	400
- 680K	68 ± 10%	20	1 k	2.520 M	5.0	0.24	360
- 820K	82 ± 10%	20	1 k	2.520 M	5.0	0.35	340
- 101K	100 ± 10%	20	1 k	0.796 M	4.0	0.40	320
- 121K	120 ± 10%	20	1 k	0.796 M	4.0	0.45	300
- 151K	150 ± 10%	20	1 k	0.796 M	3.5	0.50	280
- 181K	180 ± 10%	20	1 k	0.796 M	3.0	0.75	260
- 221K	220 ± 10%	20	1 k	0.796 M	3.0	0.90	240
- 271K	270 ± 10%	20	1 k	0.796 M	2.5	1.00	220
- 331K	330 ± 10%	20	1 k	0.796 M	2.5	1.10	200
- 391K	390 ± 10%	20	1 k	0.796 M	2.0	1.20	180
- 471K	470 ± 10%	20	1 k	0.796 M	2.0	1.50	160
- 561K	560 ± 10%	20	1 k	0.796 M	2.0	1.80	150

Packaging: 500 pieces per bag

RLB0912 Series Electrical Characteristics

BOURNS Part No.	Inductance (µH)	Q min.	Test freq. (Hz)		SRF (MHz) min.	RDC (Ω) max.	IDC (A) max.
			L	Q			
*RLB 0912 - 1R5M	1.5 ± 20%	30	1 k	7.960 M	78.0	0.008	5.4
- 2R2M	2.2 ± 20%	30	1 k	7.960 M	63.0	0.010	4.5
- 3R3M	3.3 ± 20%	30	1 k	7.960 M	50.0	0.018	3.6
- 4R7M	4.7 ± 20%	30	1 k	7.960 M	41.0	0.022	3.1
- 6R8M	6.8 ± 20%	30	1 k	7.960 M	33.0	0.028	2.5
- 100K	10.0 ± 10%	60	1 k	2.520 M	27.0	0.043	2.1
- 150K	15.0 ± 10%	50	1 k	2.520 M	21.0	0.056	1.7
- 220K	22.0 ± 10%	50	1 k	2.520 M	17.0	0.086	1.4
- 330K	33.0 ± 10%	45	1 k	2.520 M	13.0	0.140	1.1
- 470K	47.0 ± 10%	40	1 k	2.520 M	11.0	0.170	0.96
- 680K	68.0 ± 10%	35	1 k	2.520 M	9.0	0.280	0.79
- 101K	100.0 ± 10%	55	1 k	0.796 M	7.2	0.330	0.66
- 151K	150.0 ± 10%	40	1 k	0.796 M	5.7	0.560	0.53
- 221K	220.0 ± 10%	30	1 k	0.796 M	4.5	0.720	0.44
- 331K	330.0 ± 10%	25	1 k	0.796 M	3.6	1.100	0.36
- 471K	470.0 ± 10%	25	1 k	0.796 M	2.9	1.700	0.30
- 681K	680.0 ± 10%	25	1 k	0.796 M	2.3	2.300	0.25
- 102K	1000.0 ± 10%	55	1 k	0.252 M	1.9	4.300	0.20

*RLH 0912-(LC)TR: Housing PBT-4130 (UL94V-O)

Packaging: 500 pieces per bag; available on tape and reel - 500 pieces per reel

Materials

Core: .....Ferrite DR core
Wire: .....Enameled copper wire
Lead: .....Tinned copper wire for bulk
Lead: .....Tinned CP wire for tape
Tube.....Shrinkable tube 125°C, 600V
Temperature Rise: .....20°C max. at rated current
Operating Temperature: ....-20 to +80°C

Materials For Items On Following Page

Core: .....Ferrite DR core
Wire: .....Enameled copper wire
Lead: .....0.6 dia. - 0.8 dia. mm soldered copper wire (3.3µH - 47 µH) } RLB1314 only
Lead: .....0.8 dia. mm tinned copper wire (68 µH - 15 µH) } RLB1314 only
Tube.....Shrinkable tube 125°C, 600V
Temperature Rise:.....40°C max. at rated current for 0914 / 20°C max. for 1314

RLB0712/RLB0912/RLB0914/RLB1314 Series Inductors

BOURNS®

RLB Series Electrical Characteristics

BOURNS Part No.	Inductance (µH)	Q min.	Test freq. (MHz) L	Q	SRF (MHz) min.	RDC (Ω) max.	IDC (A) max.
RLB 0914 - 3R3M	3.3 ± 20%	20	7.960		70.0	0.027	3.60
- 4R7M	4.7 ± 20%	20	7.960		50.0	0.033	3.20
- 6R8M	6.8 ± 20%	20	7.960		30.0	0.039	3.00
- 100K	10.0 ± 10%	50	2.520		20.0	0.048	2.70
- 120K	12.0 ± 10%	50	2.520		15.0	0.055	2.50
- 150K	15.0 ± 10%	50	2.520		10.0	0.060	2.40
- 180K	18.0 ± 10%	40	2.520		9.5	0.065	2.30
- 220K	22.0 ± 10%	40	2.520		9.0	0.090	1.90
- 270K	27.0 ± 10%	40	2.520		8.5	0.110	1.80
- 330K	33.0 ± 10%	40	2.520		8.0	0.120	1.70
- 390K	39.0 ± 10%	30	2.520		7.0	0.130	1.60
- 470K	47.0 ± 10%	30	2.520		6.0	0.140	1.50
- 560K	56.0 ± 10%	30	2.520		5.0	0.200	1.30
- 680K	68.0 ± 10%	30	2.520		4.5	0.210	1.20
- 820K	82.0 ± 10%	30	2.520		4.0	0.230	1.10
- 101K	100.0 ± 10%	30	0.796		3.5	0.280	1.00
- 121K	120.0 ± 10%	30	0.796		3.0	0.320	0.90
- 151K	150.0 ± 10%	30	0.796		2.8	0.370	0.80
- 181K	180.0 ± 10%	30	0.796		2.6	0.540	0.75
- 221K	220.0 ± 10%	20	0.796		2.4	0.600	0.70
- 271K	270.0 ± 10%	20	0.796		2.2	0.680	0.65
- 331K	330.0 ± 10%	20	0.796		2.0	0.760	0.60
- 391K	390.0 ± 10%	20	0.796		1.9	0.850	0.55
- 471K	470.0 ± 10%	20	0.796		1.8	1.300	0.50
- 561K	560.0 ± 10%	20	0.796		1.7	1.400	045
- 681K	680.0 ± 10%	20	0.796		1.6	1.600	0.40
- 821K	820.0 ± 10%	20	0.796		1.5	1.800	0.35
- 102K	1000.0 ± 10%	40	0.252		1.3	2.100	0.30

Packaging: 500 pieces per bag

RLB1314 Series Electrical Characteristics

BOURNS Part No.	Inductance (µH)	Q Ref.	Test freq. (Hz) L	Q	SRF (MHz) Typ.	RDC (Ω) max.	IDC (A) max.	W Dia. mm(in) ±0.05 (.002)	F mm(in) ±1.0 (.04)
RLB 1314 - 3R3M	3.3 ± 20%	90	1 k	7.96 M	59.00	0.008	5.600	0.8 (.032)	10.0 (.394)
- 4R7M	4.7 ± 20%	100	1 k	7.96 M	45.00	0.009	4.700	0.8 (.032)	10.0 (.394)
- 6R8M	6.8 ± 20%	80	1 k	7.96 M	34.00	0.012	3.900	0.7 (.028)	10.0 (.394)
- 100M	10.0 ± 20%	140	1 k	2.52 M	26.00	0.015	3.200	0.7 (.028)	10.0 (.394)
- 150M	15.0 ± 20%	120	1 k	2.52 M	19.00	0.019	2.600	0.7 (.028)	10.0 (.394)
- 220K	22.0 ± 10%	110	1 k	2.52 M	14.00	0.026	2.200	0.7 (.028)	10.0 (.394)
- 330K	33.0 ± 10%	100	1 k	2.52 M	10.00	0.045	1.800	0.6 (.024)	10.0 (.394)
- 470K	47.0 ± 10%	90	1 k	2.52 M	8.30	0.056	1.500	0.6 (.024)	10.0 (.394)
- 680K	68.0 ± 10%	80	1 k	2.52 M	6.70	0.092	1.200	0.8 (.032)	7.0 (.276)
- 101K	100.0 ± 10%	70	1 k	796 K	5.40	0.120	1.000	0.8 (.032)	7.0 (.276)
- 151K	150.0 ± 10%	70	1 k	796 K	4.30	0.200	0.820	0.8 (.032)	7.0 (.276)
- 221K	220.0 ± 10%	40	1 k	796 K	3.40	0.250	0.680	0.8 (.032)	7.0 (.276)
- 331K	330.0 ± 10%	40	1 k	796 K	2.70	0.420	0.550	0.8 (.032)	7.0 (.276)
- 471K	470.0 ± 10%	30	1 k	796 K	2.30	0.510	0.460	0.8 (.032)	7.0 (.276)
- 681K	680.0 ± 10%	30	1 k	796 K	1.90	0.790	0.380	0.8 (.032)	7.0 (.276)
- 102K	1000.0 ± 10%	40	1 k	252 K	1.60	1.300	0.310	0.8 (.032)	7.0 (.276)
- 152K	1500.0 ± 10%	30	1 k	252 K	1.30	1.700	0.250	0.8 (.032)	7.0 (.276)
- 222K	2200.0 ± 10%	60	1 k	252 K	1.10	2.900	0.210	0.8 (.032)	7.0 (.276)
- 332K	3300.0 ± 10%	50	1 k	252 K	0.90	3.700	0.170	0.8 (.032)	7.0 (.276)
- 472K	4700.0 ± 10%	50	1 k	252 K	0.76	5.600	0.140	0.8 (.032)	7.0 (.276)
- 682K	6800.0 ± 10%	60	1 k	252 K	0.65	9.400	0.120	0.8 (.032)	7.0 (.276)
- 103K	10000.0 ± 10%	80	1 k	79.6 K	0.53	12.000	0.100	0.8 (.032)	7.0 (.276)
- 153K	15000.0 ± 10%	70	1 k	79.6 K	0.41	15.000	0.082	0.8 (.032)	7.0 (.276)

Packaging: 300 pieces per bag