



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

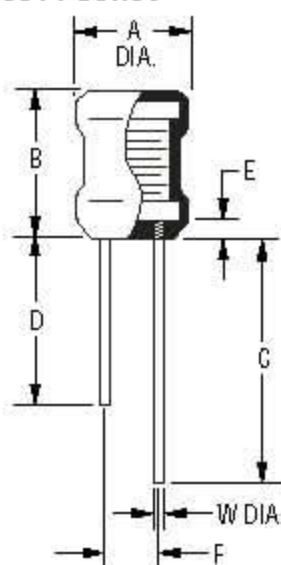
Temperature Rise	20 °C max. at rated current
Operating Temperature.....	-20 °C to +80 °C
Storage Temperature.....	-25 °C to +85 °C

Materials

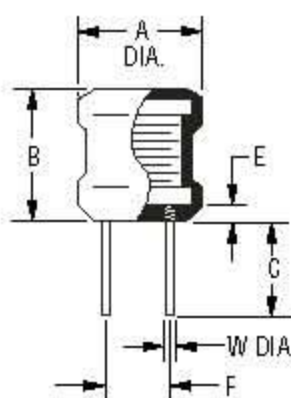
Core Material.....	Ferrite DR core
Wire.....	Enameled copper wire
Terminal.....	Cu/Sn
Tube	Shrinkable tube 125 °C, 600 V

Product Dimensions

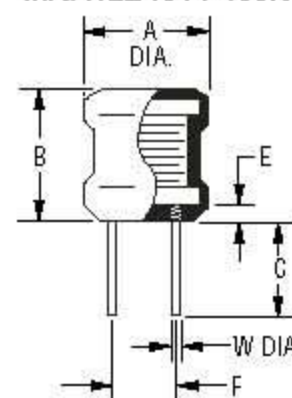
RLB0608, RLB0812, RLB1014,
RLB0712, RLB0914 Series



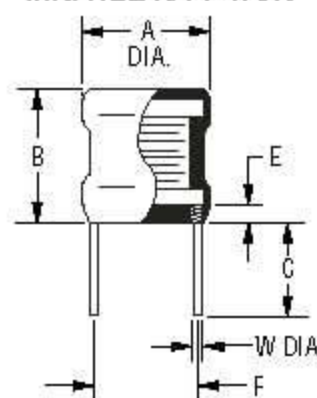
RLB0912 Series



RLB1314-680K
thru RLB1314-153K



RLB1314-3R3M
thru RLB1314-470K



Series	A	B	C	D	E	F	W (DIA.)	Inductance Range
RLB0608	$\frac{5.0 \pm 0.5}{(.197 \pm .020)}$	$\frac{6.5 +1.0/-0.5}{(.256 +.039/-0.020)}$	$\frac{28.0 \pm 5.0}{(1.102 \pm .197)}$	$\frac{20.0 \pm 5.0}{(.787 \pm .197)}$	$\frac{2.5 + 0}{(.098 + 0)}$	$\frac{2.0 \pm 0.5}{(.079 \pm .020)}$	$\frac{0.50}{(.020)}$	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	$\frac{11.7 \pm 0.8}{(.461 \pm .031)}$	$\frac{12.0 \pm 1.0}{(.472 \pm .039)}$	$\frac{15.0 \pm 5.0}{(.591 \pm .197)}$	—	$\frac{2.5 + 0}{(.098 + 0)}$	$\frac{9.0 \pm 1.0}{(.354 \pm .039)}$	Per Specs.	3.3 μ H — 47 μ H
	$\frac{11.7 \pm 0.8}{(.461 \pm .031)}$	$\frac{12.0 \pm 1.0}{(.472 \pm .039)}$	$\frac{15.0 \pm 5.0}{(.591 \pm .197)}$	—	$\frac{2.5 + 0}{(.098 + 0)}$	$\frac{7.0 \pm 0.8}{(.276 \pm .031)}$	$\frac{0.80}{(.031)}$	68 μ 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

RLB0712 Series Electrical Characteristics

BOURNS Part No.	Inductance (μ H)	Q ref.	Test freq. (Hz)		SRF (MHz) min.	RDC (Ω) 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 (μ H)	Q ref.	Test freq. (Hz)		SRF (MHz) min.	RDC (Ω) max.	IDC (A) max.
			L	Q			
RLB0912-1R0ML	1.0 $\pm$ 20 %	30	1 k	7.960 M	88.0	0.010	6.0
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

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RLB Series Radial Inductors

RLB1314 Series Electrical Characteristics

BOURNS Part No.	Inductance (μ H)	Q Ref.	Test freq. (Hz)		SRF (MHz) Typ.	RDC (Ω) max.	IDC (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. 10/08

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