



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



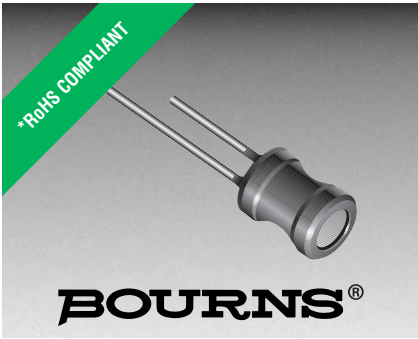
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## Features

- Available in E12 series
- Inductance range: 1.0  $\mu$ H to 47 mH
- RoHS compliant\*

## Applications

- Power supplies
- DC/DC converters
- General use

# RLB9012 Radial Inductor

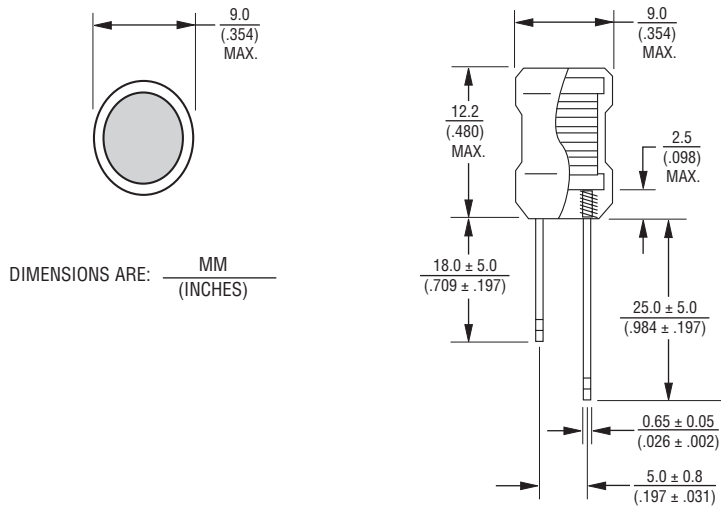
### General Specifications

Inductance Drop at Rated Current (IDC)	.....5 %
Operating Temperature	.....-55 °C to +125 °C
Storage Temperature	.....-55 °C to +105 °C

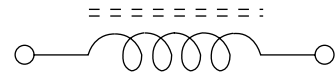
### Materials

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

### Product Dimensions



### Electrical Schematic



### Typical Part Marking



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

### Electrical Characteristics

BOURNS Part No.	Inductance ( $\mu$ H)	Q ref.	Test freq. (MHz)		SRF (MHz) min.	RDC (ohms) max.	IDC (A) max.
			L	Q			
RLB9012-1R0ML	1.0 $\pm$ 20 %	20	1K	7.96	150.00	0.013	10.0
RLB9012-1R5ML	1.5 $\pm$ 20 %	20	1K	7.96	100.00	0.016	8.50
RLB9012-2R2ML	2.2 $\pm$ 20 %	20	1K	7.96	90.00	0.021	6.50
RLB9012-3R3ML	3.3 $\pm$ 20 %	20	1K	7.96	65.00	0.025	5.50
RLB9012-4R7ML	4.7 $\pm$ 20 %	20	1K	7.96	51.00	0.030	4.60
RLB9012-6R8ML	6.8 $\pm$ 20 %	20	1K	7.96	29.00	0.035	4.10
RLB9012-100KL	10.0 $\pm$ 10 %	50	1K	2.52	14.00	0.045	3.40
RLB9012-120KL	12.0 $\pm$ 10 %	50	1K	2.52	13.00	0.050	3.10
RLB9012-150KL	15.0 $\pm$ 10 %	50	1K	2.52	12.00	0.056	2.90
RLB9012-180KL	18.0 $\pm$ 10 %	40	1K	2.52	11.00	0.061	2.66
RLB9012-220KL	22.0 $\pm$ 10 %	40	1K	2.52	9.20	0.070	2.40
RLB9012-270KL	27.0 $\pm$ 10 %	40	1K	2.52	8.50	0.080	2.22
RLB9012-330KL	33.0 $\pm$ 10 %	30	1K	2.52	7.80	0.090	2.05
RLB9012-390KL	39.0 $\pm$ 10 %	30	1K	2.52	6.90	0.100	1.85
RLB9012-470KL	47.0 $\pm$ 10 %	30	1K	2.52	6.50	0.160	1.77
RLB9012-560KL	56.0 $\pm$ 10 %	30	1K	2.52	5.40	0.180	1.48

Packaging: 200 pieces per bag

\*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.

# RLB9012 Radial Inductor

**BOURNS®**

## Electrical Characteristics (Continued)

BOURNS Part No.	Inductance (µH)	Q ref.	Test freq. (MHz)		SRF (MHz) min.	RDC (ohms) max.	IDC (A) max.
			L	Q			
RLB9012-680KL	68.0 ± 10 %	30	1K	2.52	4.90	0.210	1.36
RLB9012-820KL	82.0 ± 10 %	30	1K	2.52	4.10	0.230	1.30
RLB9012-101KL	100.0 ± 10 %	20	1K	0.796	3.70	0.280	1.40
RLB9012-121KL	120.0 ± 10 %	20	1K	0.796	3.40	0.320	1.25
RLB9012-151KL	150.0 ± 10 %	20	1K	0.796	3.20	0.370	1.15
RLB9012-181KL	180.0 ± 10 %	20	1K	0.796	2.80	0.580	1.08
RLB9012-221KL	220.0 ± 10 %	20	1K	0.796	2.70	0.650	1.00
RLB9012-271KL	270.0 ± 10 %	20	1K	0.796	2.40	0.750	0.90
RLB9012-331KL	330.0 ± 10 %	20	1K	0.796	2.30	0.850	0.78
RLB9012-391KL	390.0 ± 10 %	20	1K	0.796	2.10	1.000	0.74
RLB9012-471KL	470.0 ± 10 %	20	1K	0.796	1.90	1.100	0.68
RLB9012-561KL	560.0 ± 10 %	20	1K	0.796	1.80	1.400	0.64
RLB9012-681KL	680.0 ± 10 %	20	1K	0.796	1.60	1.600	0.59
RLB9012-821KL	820.0 ± 10 %	20	1K	0.796	1.50	1.800	0.56
RLB9012-102KL	1000.0 ± 10 %	20	1K	0.252	1.30	2.900	0.51
RLB9012-122KL	1200.0 ± 10 %	15	1K	0.252	1.20	3.400	0.48
RLB9012-152KL	1500.0 ± 10 %	15	1K	0.252	1.10	3.800	0.43
RLB9012-182KL	1800.0 ± 10 %	15	1K	0.252	1.00	5.300	0.39
RLB9012-222KL	2200.0 ± 10 %	15	1K	0.252	0.80	5.900	0.36
RLB9012-272KL	2700.0 ± 10 %	15	1K	0.252	0.70	8.200	0.32
RLB9012-332KL	3300.0 ± 10 %	15	1K	0.252	0.60	9.100	0.29
RLB9012-392KL	3900.0 ± 10 %	15	1K	0.252	0.55	9.900	0.27
RLB9012-472KL	4700.0 ± 10 %	15	1K	0.252	0.50	13.60	0.24
RLB9012-562KL	5600.0 ± 10 %	15	1K	0.252	0.45	14.90	0.22
RLB9012-682KL	6800.0 ± 10 %	15	1K	0.252	0.40	20.70	0.20
RLB9012-822KL	8200.0 ± 10 %	15	1K	0.252	0.35	22.70	0.18
RLB9012-103KL	10,000 ± 10 %	15	1K	0.079	0.32	25.10	0.17
RLB9012-123KL	12,000 ± 10 %	15	1K	0.079	0.28	34.70	0.15
RLB9012-153KL	15,000 ± 10 %	15	1K	0.079	0.25	48.90	0.14
RLB9012-183KL	18,000 ± 10 %	15	1K	0.079	0.23	53.60	0.12
RLB9012-223KL	22,000 ± 10 %	15	1K	0.079	0.21	59.30	0.11
RLB9012-273KL	27,000 ± 10 %	15	1K	0.079	0.19	82.70	0.10
RLB9012-323KL	33,000 ± 10 %	15	1K	0.079	0.17	91.50	0.09
RLB9012-393KL	39,000 ± 10 %	15	1K	0.079	0.15	125.50	0.08
RLB9012-473KL	47,000 ± 10 %	15	1K	0.079	0.12	137.80	0.08

Packaging: 200 pieces per bag

REV. 03/15

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