



## Features

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

## Applications

- Power supplies
- DC/DC converters
- General use

**BOURNS®**

# RLB9012 Radial Inductor

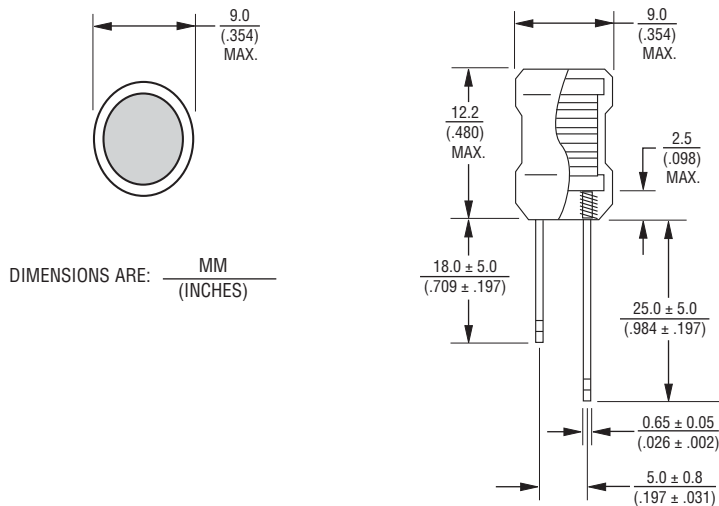
### General Specifications

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

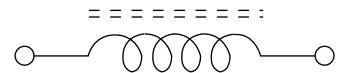
### Materials

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

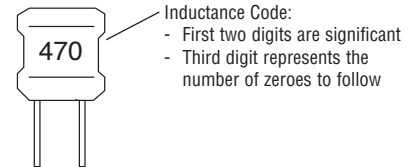
### Product Dimensions



### Electrical Schematic



### Typical Part Marking



### Electrical Characteristics

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



**WARNING Cancer and Reproductive Harm**  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

\*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.  
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Packaging: 200 pieces per bag

# RLB9012 Radial Inductor

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## Electrical Characteristics (Continued)

BOURNS Part No.	Inductance (µH) @ 1 kHz	Q ref.	Q Test freq. (MHz)	SRF (MHz) min.	RDC (ohms) max.	IDC (A) max.
			Q			
RLB9012-680KL	68.0 ± 10 %	30	2.52	4.90	0.210	1.36
RLB9012-820KL	82.0 ± 10 %	30	2.52	4.10	0.230	1.30
RLB9012-101KL	100.0 ± 10 %	20	0.796	3.70	0.280	1.40
RLB9012-121KL	120.0 ± 10 %	20	0.796	3.40	0.320	1.25
RLB9012-151KL	150.0 ± 10 %	20	0.796	3.20	0.370	1.15
RLB9012-181KL	180.0 ± 10 %	20	0.796	2.80	0.580	1.08
RLB9012-221KL	220.0 ± 10 %	20	0.796	2.70	0.650	1.00
RLB9012-271KL	270.0 ± 10 %	20	0.796	2.40	0.750	0.90
RLB9012-331KL	330.0 ± 10 %	20	0.796	2.30	0.850	0.78
RLB9012-391KL	390.0 ± 10 %	20	0.796	2.10	1.000	0.74
RLB9012-471KL	470.0 ± 10 %	20	0.796	1.90	1.100	0.68
RLB9012-561KL	560.0 ± 10 %	20	0.796	1.80	1.400	0.64
RLB9012-681KL	680.0 ± 10 %	20	0.796	1.60	1.600	0.59
RLB9012-821KL	820.0 ± 10 %	20	0.796	1.50	1.800	0.56
RLB9012-102KL	1000.0 ± 10 %	20	0.252	1.30	2.900	0.51
RLB9012-122KL	1200.0 ± 10 %	15	0.252	1.20	3.400	0.48
RLB9012-152KL	1500.0 ± 10 %	15	0.252	1.10	3.800	0.43
RLB9012-182KL	1800.0 ± 10 %	15	0.252	1.00	5.300	0.39
RLB9012-222KL	2200.0 ± 10 %	15	0.252	0.80	5.900	0.36
RLB9012-272KL	2700.0 ± 10 %	15	0.252	0.70	8.200	0.32
RLB9012-332KL	3300.0 ± 10 %	15	0.252	0.60	9.100	0.29
RLB9012-392KL	3900.0 ± 10 %	15	0.252	0.55	9.900	0.27
RLB9012-472KL	4700.0 ± 10 %	15	0.252	0.50	13.60	0.24
RLB9012-562KL	5600.0 ± 10 %	15	0.252	0.45	14.90	0.22
RLB9012-682KL	6800.0 ± 10 %	15	0.252	0.40	20.70	0.20
RLB9012-822KL	8200.0 ± 10 %	15	0.252	0.35	22.70	0.18
RLB9012-103KL	10,000 ± 10 %	15	0.079	0.32	25.10	0.17
RLB9012-123KL	12,000 ± 10 %	15	0.079	0.28	34.70	0.15
RLB9012-153KL	15,000 ± 10 %	15	0.079	0.25	48.90	0.14
RLB9012-183KL	18,000 ± 10 %	15	0.079	0.23	53.60	0.12
RLB9012-223KL	22,000 ± 10 %	15	0.079	0.21	59.30	0.11
RLB9012-273KL	27,000 ± 10 %	15	0.079	0.19	82.70	0.10
RLB9012-333KL	33,000 ± 10 %	15	0.079	0.17	91.50	0.09
RLB9012-393KL	39,000 ± 10 %	15	0.079	0.15	125.50	0.08
RLB9012-473KL	47,000 ± 10 %	15	0.079	0.12	137.80	0.08

Packaging: 200 pieces per bag

**BOURNS®**

Asia-Pacific: Tel: +886-2 2562-4117 • Email: asiacus@bourns.com

EMEA: Tel: +36 88 885 877 • Email: eurocus@bourns.com

The Americas: Tel: +1-951 781-5500 • Email: americus@bourns.com

[www.bourns.com](http://www.bourns.com)

REV. 04/20

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