



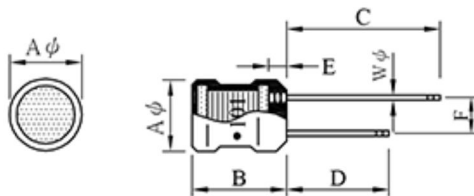
Radial Inductor **RB0914-L-□□□** Series

I . Configuration and dimensions :

Marking :

" ● " : Start

● 101----100 uH (Inductance code)



Unit : m/m

$A\phi$	B	C	D	E	F	$W\phi$
8.70 ±0.5	12.00 ±1.0	25.00 ±5.0	18.00 ±5.0	2.50 max.	5.00 ±0.8	0.65

II . Description :

- a . Ferrite drum core construction.
- b . Enamelled copper wire : F class
- c . Product weight : 1.83g (ref.)
- d . Moisture sensitivity Level 1
- e . Products comply with RoHS' requirements
- f . Halogen free available

III . General specification :

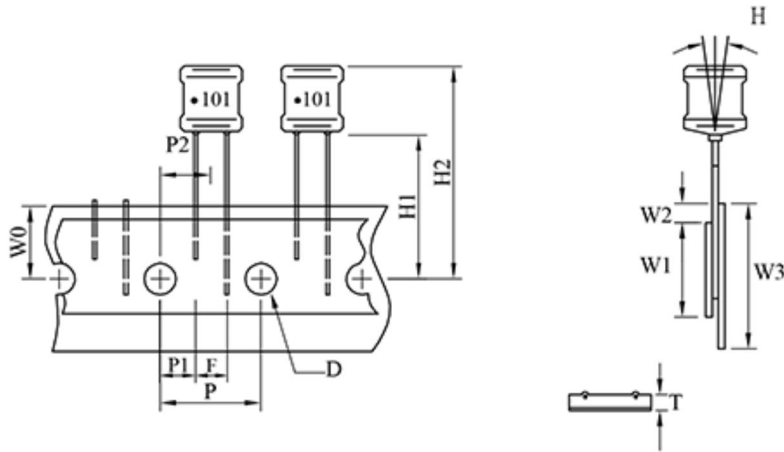
- a . Storage temp. : -40°C ~ +125°C
- b . Operating temp. : -40°C ~ +125°C
(Temp. rise included.)

IV . Electrical characteristics :

DWG No.	Indutance (μ H)	Q min.	Test Freq. (MHz)		SRF (MHz) min.	RDC (Ω) max.	IDC (A) max.
			L	Q			
RB09143R3ML□-□□□	3.3 \pm 20%	20	7.96		70.0	0.027	3.60
RB09144R7ML□-□□□	4.7 \pm 20%	20	7.96		50.0	0.033	3.20
RB09146R8ML□-□□□	6.8 \pm 20%	20	7.96		30.0	0.039	3.00
RB0914100KL□-□□□	10.0 \pm 10%	50	2.52		20.0	0.048	2.70
RB0914120KL□-□□□	12.0 \pm 10%	50	2.52		15.0	0.055	2.50
RB0914150KL□-□□□	15.0 \pm 10%	50	2.52		10.0	0.060	2.40
RB0914180KL□-□□□	18.0 \pm 10%	40	2.52		9.5	0.065	2.30
RB0914220KL□-□□□	22.0 \pm 10%	40	2.52		9.0	0.090	1.90
RB0914270KL□-□□□	27.0 \pm 10%	40	2.52		8.5	0.110	1.80
RB0914330KL□-□□□	33.0 \pm 10%	40	2.52		8.0	0.120	1.70
RB0914390KL□-□□□	39.0 \pm 10%	30	2.52		7.0	0.130	1.60
RB0914470KL□-□□□	47.0 \pm 10%	30	2.52		6.0	0.140	1.50
RB0914560KL□-□□□	56.0 \pm 10%	30	2.52		5.0	0.200	1.30
RB0914680KL□-□□□	68.0 \pm 10%	30	2.52		4.5	0.210	1.20
RB0914820KL□-□□□	82.0 \pm 10%	30	2.52		4.0	0.230	1.10
RB0914101KL□-□□□	100.0 \pm 10%	30	0.796		3.5	0.280	1.00
RB0914121KL□-□□□	120.0 \pm 10%	30	0.796		3.0	0.320	0.90
RB0914151KL□-□□□	150.0 \pm 10%	30	0.796		2.8	0.370	0.80
RB0914181KL□-□□□	180.0 \pm 10%	30	0.796		2.6	0.540	0.75
RB0914221KL□-□□□	220.0 \pm 10%	30	0.796		2.4	0.600	0.70
RB0914271KL□-□□□	270.0 \pm 10%	20	0.796		2.2	0.680	0.65
RB0914331KL□-□□□	330.0 \pm 10%	20	0.796		2.0	0.760	0.60
RB0914391KL□-□□□	390.0 \pm 10%	20	0.796		1.9	0.850	0.55
RB0914471KL□-□□□	470.0 \pm 10%	20	0.796		1.8	1.300	0.50
RB0914561KL□-□□□	560.0 \pm 10%	20	0.796		1.7	1.400	0.45
RB0914681KL□-□□□	680.0 \pm 10%	20	0.796		1.6	1.600	0.40
RB0914821KL□-□□□	820.0 \pm 10%	20	0.796		1.5	1.800	0.35
RB0914102KL□-□□□	1000.0 \pm 10%	40	0.252		1.3	2.100	0.30

- 1). Electrical specifications at 25°C
- 2). IDC base on Temp. rise 20°C max.

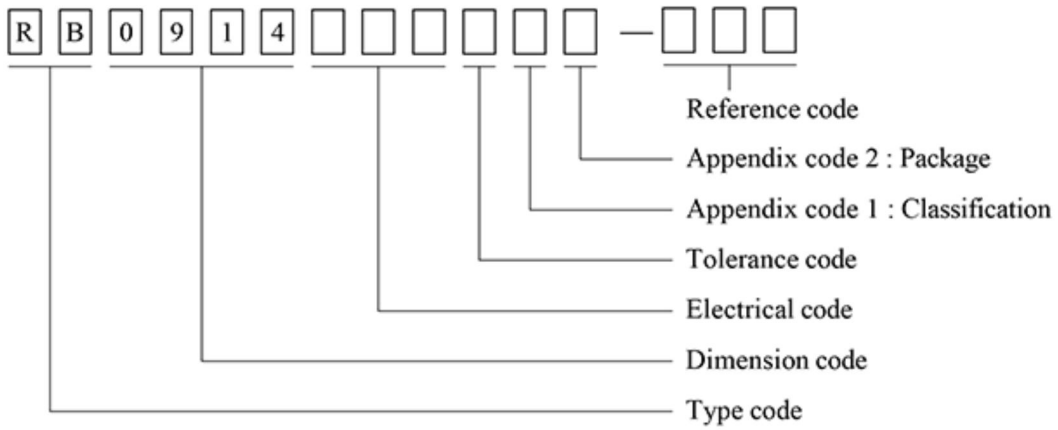
V . Packaging information :



※ 500 Pcs / Reel

Item	Symbol	Specification			
		Milimeter		Inch	
		Size	Tolerance	Size	Tolerance
Tape feed hole diameter	D	4.00	±0.20	0.157	±0.008
Component lead pitch	F	5.00	±0.50	0.200	±0.020
Front-to-rear deflection	H	2.00	Max.	0.079	Max.
Feed hole to bottom of component	H1	18.50	±0.80	0.728	±0.040
Feed hole to overall component height	H2	32.50	Max.	1.280	Max.
Feed hole pitch	P	12.70	±0.30	0.500	±0.012
Lead location	P1	3.85	±0.70	0.152	±0.028
Center of component location	P2	6.35	±1.30	0.250	±0.051
Overall taped package thickness	T	1.42	Max.	0.056	Max.
Feed hole location	W0	9.00	±0.50	0.354	±0.020
Adhesive tape width	W1	15.00	±0.50	0.598	±0.020
Adhesive tape position	W2	4.00	Max.	0.157	Max.
Tape width	W3	18.00	±0.50	0.709	±0.020

VI . Dwging number expression :



Appendix code 1 : Product Classification

L : Lead Free Standard products comply with RoHS' requirements

Appendix code 2 : Package Information

Code	Inner package	Inner package Q'TY	Remark
A	Tray	200 pcs	
B	Bag	100 pcs	
C	T.B.D.	T.B.D.	
D	T / R (Reel Package)	500 pcs	

VII . Reliability test :

Item	Reference documents	Test Condition	Test Specification
1.High Temperature Exposure	MIL-STD-202 Method 108	1.Temperature: 125°C 2.Time:96 hours.	1.No mechanical and electrical damage. 2.Inductance shall not change more than ±10%.
2.Temperature Cycling	JESD22 Method JA-104	1.Temperature: -40°C ~ 125°C 2.Number of cycle:96 cycle 3.Dwell time:30 minutes	1.No mechanical and electrical damage. 2.Inductance shall not change more than ±10%.
3.Biased Humidity Test	MIL-STD-202 Method 103	1.Temperature: 85±5 °C 2.Time:96 Hours 3.Humidity: 85±5% RH.	1.No mechanical and electrical damage. 2.Inductance shall not change more than ±10%.
4.Operational Life	MIL-PRF-27	1.Temperature: 125°C 2.Time:96 hours. 3.Apply rated current.	1.No mechanical and electrical damage. 2.Inductance shall not change more than ±10%.
5.Exeternal Visual	MIL-STD-883 Method 2009	Inspect product constructions, marking and workmanship.	1.No pollution on the surface of products. 2. Clear marking. 3.No crack.
6.Physical Dimensions	JESD22 Method JB-100	Verify physical dimensions to the applicable product detail specification.	Per product specification standard
7.Resistance to solvents	MIL-STD-202 Method 215	Immerse into solvent for 3±0.5 minutes & brush 10 times for their cycles.	1.No body change in appearance. 2.No marking blurred. 3.Inductance shall not change more than ±10%.
8.Vibration Test	MIL-STD-202 Method 204	1.Frequency and Amplitued : 10-2000-10 Hz, 1.5 mm. 2.Direction:X, Y, Z 3.Test duration:2 hours for each direction, 6 hours in total.	1.No mechanical and electrical damage. 2.Inductance shall not change more than ±10%.
9.Resistance To Soldering Heat Test	MIL-STD-202 Method 210	1.Method : Dip 2.Temperature : 260±5 3.Time (temp. ≥ 260°C) : 10 second. 4.Number of times : 3 times.	1.No mechanical and electrical damage. 2.Inductance shall not change more than ±10%.
10.Rated current	MIL-STD-202 Method 330	Apply rated current for 5 second.	1.No mechanical and electrical damage. 2.Inductance shall not change more than ±10%.
11.Temperature rise	MIL-PRF-27	Apply rated current for 10 minutes.	1.No mechanical and electrical damage. 2.Inductance shall not change more than ±10%.
12.Over load	MIL-PRF-27	Apply twice as rated current for 5 minutes. (It's not application to some special design)	1.No mechanical and electrical damage. 2.Inductance shall not change more than ±10%.
13.Solderability Test	J-STD-002	Dip pads in flux then dip in solder pot at 240±5 for 5 senconds.	Terminals area must have 95% min. Solder coverage.
14.Electrical Characteriazation	User Spec.	1.Operating temperature : -40°C~125°C 2.Room temperature : 25°C.	1.No mechanical and electrical damage. 2.Inductance shall not change more than ±10%.
15.Withstanding Voltage Test	MIL-STD-202 Method 201	1.DV:500V 2.Time:1minutes	1.During the test no breakdown. 2.The characteristic is normal after test.
16.Drop	JESD22-B111	Packaged & Drop down from 1m.In 1 angle lridges & 2 surfaces orientation.	1.No case deformation or change in appearance. 2.Inductance shall not change more than ±10%.
17.Terminal Strength Test	JIS-C-6429	1.Apply push force to samples mounted on PCB. 2.Force of 1.8 kg for 60±1 seconds.	After test, inductors shall be no mechanical damage.