

SPECIFICATION FOR APPROVAL

REF. :

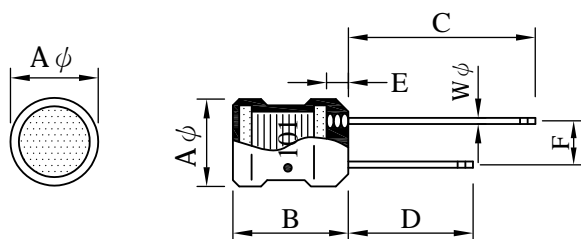
PROD. NAME	Radial Inductor	ABC'S DWG NO.	RB0914□□□□L□-□□□		
		REV.	20161220-D	PAGE	1

I . Configuration and dimensions :

Marking :

" ● " : Start

● 101----100 uH (Inductance code)



Unit : m/m

Aφ	B	C	D	E	F	Wφ
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.)

SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	Radial Inductor	ABC'S DWG NO.	RB0914□□□□L□-□□□		
		REV.	20161220-D	PAGE	2

IV . Electrical characteristics :

DWG No.	Indutance (μ H)	Q min.	Test Freq. (MHz)		SRF (MHz) min.	RDC (Ω) max.	Isat (A) typ.	Irms (A) typ.
			L	Q				
RB09143R3ML□-□□□	3.3 \pm 20%	20	7.96		70.0	0.027	11.30	3.60
RB09144R7ML□-□□□	4.7 \pm 20%	20	7.96		50.0	0.033	10.00	3.20
RB09146R8ML□-□□□	6.8 \pm 20%	20	7.96		30.0	0.039	8.50	3.00
RB0914100KL□-□□□	10.0 \pm 10%	50	2.52		20.0	0.048	6.70	2.70
RB0914120KL□-□□□	12.0 \pm 10%	50	2.52		15.0	0.055	6.20	2.50
RB0914150KL□-□□□	15.0 \pm 10%	50	2.52		10.0	0.060	5.30	2.40
RB0914180KL□-□□□	18.0 \pm 10%	40	2.52		9.5	0.065	5.00	2.30
RB0914220KL□-□□□	22.0 \pm 10%	40	2.52		9.0	0.090	4.50	1.90
RB0914270KL□-□□□	27.0 \pm 10%	40	2.52		8.5	0.110	4.00	1.80
RB0914330KL□-□□□	33.0 \pm 10%	40	2.52		8.0	0.120	3.80	1.70
RB0914390KL□-□□□	39.0 \pm 10%	30	2.52		7.0	0.130	3.40	1.60
RB0914470KL□-□□□	47.0 \pm 10%	30	2.52		6.0	0.140	3.20	1.56
RB0914560KL□-□□□	56.0 \pm 10%	30	2.52		5.0	0.200	3.00	1.50
RB0914680KL□-□□□	68.0 \pm 10%	30	2.52		4.5	0.210	2.70	1.33
RB0914820KL□-□□□	82.0 \pm 10%	30	2.52		4.0	0.230	2.50	1.28
RB0914101KL□-□□□	100.0 \pm 10%	30	0.796		3.5	0.280	2.10	1.10
RB0914121KL□-□□□	120.0 \pm 10%	30	0.796		3.0	0.320	1.90	1.05
RB0914151KL□-□□□	150.0 \pm 10%	30	0.796		2.8	0.370	1.80	1.00
RB0914181KL□-□□□	180.0 \pm 10%	30	0.796		2.6	0.540	1.63	0.87
RB0914221KL□-□□□	220.0 \pm 10%	30	0.796		2.4	0.600	1.50	0.80
RB0914271KL□-□□□	270.0 \pm 10%	20	0.796		2.2	0.680	1.40	0.77
RB0914331KL□-□□□	330.0 \pm 10%	20	0.796		2.0	0.760	1.25	0.74
RB0914391KL□-□□□	390.0 \pm 10%	20	0.796		1.9	0.850	1.15	0.70
RB0914471KL□-□□□	470.0 \pm 10%	20	0.796		1.8	1.300	1.00	0.56
RB0914561KL□-□□□	560.0 \pm 10%	20	0.796		1.7	1.400	0.95	0.52
RB0914681KL□-□□□	680.0 \pm 10%	20	0.796		1.6	1.600	0.90	0.49
RB0914821KL□-□□□	820.0 \pm 10%	20	0.796		1.5	1.800	0.83	0.46
RB0914102KL□-□□□	1000.0 \pm 10%	40	0.252		1.3	2.100	0.65	0.42

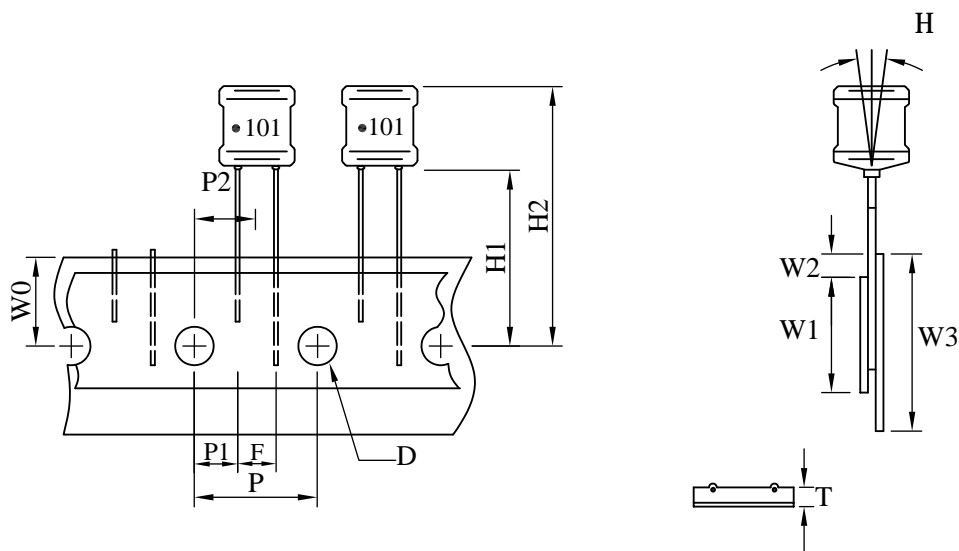
- 1). Electrical specifications at 25°C
- 2). Isat base on $\Delta L / L0A=10\%$ typ.(Approximately transient current)
- 3). Irms base on Temp. rise 40°C typ.

SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	Radial Inductor	ABC'S DWG NO.	RB0914□□□□L□-□□□		
		REV.	20161220-D	PAGE	3

V . Packaging information :



※ 500 Pcs / Reel

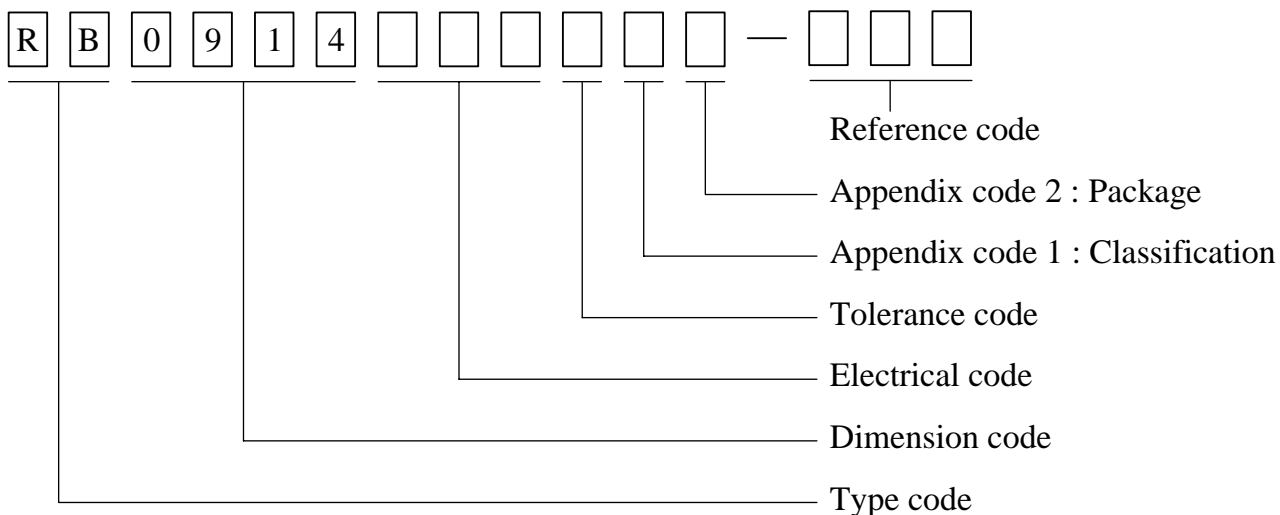
Item	Symbol	Specification			
		Milimeter		Inch	
		Size	Tolerance	Size	Tolerance
Tape feed hole diameter	D	4.00	±0.20	0.157	±0.008
Component lead pitch	F	5.00	±0.80	0.197	±0.031
Front-to-rear deflection	H	2.00	max.	0.079	max.
Feed hole to bottom of component	H1	18.50	±0.80	0.728	±0.031
Feed hole to overall 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	0.591	±0.020
Adhesive tape position	W2	4.00	max.	0.157	max.
Tape width	W3	18.00	±0.50	0.709	±0.020

SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	Radial Inductor	ABC'S DWG NO.	RB0914□□□□L□-□□□		
		REV.	20161220-D	PAGE	4

VI . Drawing number expression :



Appendix code 1 : Product Classification

Appendix code 2 : Package Information

Code	Inner package	Cover tape	Carrier tape	Bag	Package Q'TY	Remark
A	Tray	N / A	N / A	N / A	200 pcs	
B	Bag	N / A	N / A	Non-antistatic	100 pcs	
C	T.B.D.	N / A	N / A	N / A	T.B.D.	
D	T / R (Reel Package)	Adhesive	Paper tape	N / A	500 pcs	

SPECIFICATION FOR APPROVAL

REF. :

PROD.	Radial Inductor	ABC'S DWG NO.	RB0914□□□□L□-□□□		
NAME		REV.	20161220-D	PAGE	5

VII . Reliability test :

Item	Reference documents	Test Condition	Test Specification
1.High Temperature Exposure	MIL-STD-202 Method 108	1.Temperature: 125±2°C 2.Time:96±2 hours.	1.No mechanical or electrical damage. 2.Inductance shall not change more than ±10%.
2.Temperature Cycling	JESD22-A 104	1.Temperature: -40°C ~ +125°C 2.Number of cycle:100 cycle 3.Dwell time:30 minutes	1.No mechanical or electrical damage. 2.Inductance shall not change more than ±10%.
3.Biased Humidity Test	MIL-STD-202 Method 103	1.Temperature : 85±2 °C 2.Humidity: 85% RH. 3.Time:96±2 Hours	1.No mechanical or electrical damage. 2.Inductance shall not change more than ±10%.
4.Operational Life	JESD22-A 108	1.Temperature: 125°C (Temp. rise included) 2.Time:96±2 hours. 3.Rated current	1.No mechanical or electrical damage. 2.Inductance shall not change more than ±10%.
5.External Visual	JESD22-B 101 & 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-B 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 3 cycles.	1.No body change in apperance. 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 or 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°C 3.Time : 10 second. 4.Number of times : 3 times.	1.No mechanical or electrical damage. 2.Inductance shall not change more than ±10%.
10.Saturation Current	JIS C 6436 & User SPEC.	1.Applied rated current for 5 seconds. 2.Rated current	Inductance shall not drop more than 10% typ.
11.Over load	JIS C 6436 & User SPEC.	1.Applied one and half rated current for a period of 5 minutes. 2.Rated current	No electrical or mechanical damage
12.Temperature Rise Current	JIS C 6436 & User SPEC.	1.Applied rated current for 10 minutes. 2.Temperature measure by digital surface thermometer. 3.Irms current	Surface temperature rise is less than 40°C typ.
13.Solderability Test	J-STD-002 & JESD22-B 102	1.Baking in pre-testing : 150±5°C / 16Hours±30 min. 2.Dip pads in flux then dip in solder pot at 240±5°C for 5 senconds.	More than 95% soldering coverage min on terminations.
14.Electrical Characteriazation	MIL-STD-202 Method 304 & User SPEC.	1.Operating temperature : -40°C~125°C 2.Room temperature : 25°C .	1.No mechanical or electrical damage. 2.Inductance shall not change more than ±10%.
15.Drop	CNS-C6354 & GB/T 2423.8	1.Products shall be mounted on SPEC. PCB and dropped down from a height of 1m 2.Drop total time : 6 times (Every side of sample drop 2 times)	1. Adhesion on PCB shall be enough. 2. Product appearance shall not break. 3. No electrical damage.
16.Terminal Strength Test	MIL-STD-202 Method 211	1.Apply pull force to samples of terminals 2.Force of 910g for 60±1 seconds.	After test, inductors shall be no mechanical damage.

AR-001C

SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	Radial Inductor	ABC'S DWG NO.	RB0914□□□□Lo-□□□		
		REV.	20161220-D	PAGE	6

VIII . Change history :

DATE/REV.	DISCRIPTION	DRAWN	CHECKED	APPROVED
20100211-A	Modify the Operating temp. from -25~+85°C to -40~105°C	Leo Liang	Nick Chen	Nick Chen
20110401-B	Modify the Packaging information			
20130617-C	1. Modify the Reliability test 2. Modify the Operating temp. from -40°C ~ +105°C to -40°C ~ +125°C 3. Modify the Storage temp. from -25 ~ +85°C to -40°C ~ +125°C			
20161220-D	1. Modify the Packaging information 2. Modify the Electrical characteristics 3. Add Change history and Dwging number expression	Leo Liang	Nick Chen	Nick Chen