

Radial Power Inductors—RIP Series



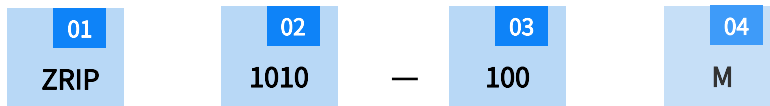
FEATURES

- Ideal as a choke coil for noise filtering
- Small size radial lead type
- With a special base for uniform lead wire
- High Q with high rate current.

APPLICATIONS

TVs and Audio equipment and Switching power supplies. Buzzers and Alarm systems, Notebook computer, DC - DC converters and air-conditions, etc

PRODUCT IDENTIFICATION



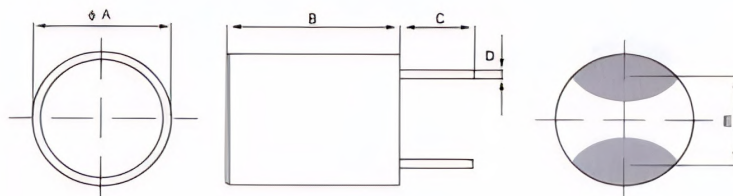
01 Type	
ZRIP	Radial Power Inductor

02 External Dimensions (ΦAxB)(mm)	
1010	11.0x 9.5
1012	11.0x 12.5
1014	11.0x 14.5

04 Nominal Inductance	
Example	Nominal value
100	10uH
330	33uH
331	330uH

05 Tolerance	
K	±10%
M	±20%
N	±30%

SHAPE AND DIMENSIONS



Part Number	Dimensions(mm)				
	ΦA(MAX)	B(MAX)	C(MAX)	D	E
ZRIP1010	11.0	9.5	5.5	0.70±0.1	5.0±0.5
ZRIP1012	11.0	12.5	5.5	0.70±0.1	5.0±0.5
ZRIP1014	11.0	14.5	5.5	0.70±0.1	5.0±0.5

Note: The products can be customized according to customer requirement

SPECIFICATIONS

● ZRIP1010TYPE

Part Number	Inductance (uH)	Tolerance	Test condition (MHz/V)	DCR Max(Ω)	Rated Current Max (mA)
ZRIP1010-100	10	K、M	100/0.25	0.018	1000
ZRIP1010-150	15		100/0.25	0.020	810
ZRIP1010-180	18		100/0.25	0.022	765
ZRIP1010-220	22		100/0.25	0.025	630
ZRIP1010-270	27		100/0.25	0.027	495
ZRIP1010-330	33		100/0.25	0.034	470
ZRIP1010-390	39		100/0.25	0.036	390
ZRIP1010-470	47		100/0.25	0.047	370
ZRIP1010-560	56		100/0.25	0.049	325
ZRIP1010-680	68		100/0.25	0.056	290
ZRIP1010-820	82		100/0.25	0.061	270
ZRIP1010-101	100		100/0.25	0.069	230
ZRIP1010-121	120		100/0.25	0.076	210
ZRIP1010-151	150		100/0.25	0.095	200
ZRIP1010-181	180		100/0.25	0.105	175
ZRIP1010-221	220		100/0.25	0.115	160
ZRIP1010-471	470		100/0.25	0.250	104

Note: When ordering, please specify tolerance code. Tolerance: K: ±10%、M: ±20%;

1. Operating temperature range -40 -125°C

2. Isat for Inductance drop 30% from its value without current

3. The products can be customized according to customer requiremen.

● ZRIP1012TYPE

Part Number	Inductance (uH)	Tolerance	Test condition (MHz/V)	DCR Max(Ω)	Rated Current Max (mA)
ZRIP1012-100	10	K、M	100/0.25	0.027	3300
ZRIP1012-120	12		100/0.25	0.029	3000
ZRIP1012-180	18		100/0.25	0.037	2500
ZRIP1012-220	22		100/0.25	0.045	2250
ZRIP1012-270	27		100/0.25	0.050	2000



Part Number	Inductance (uH)	Tolerance	Test condition (MHz/V)	DCR Max(Ω)	Rated Current Max (mA)
ZRIP1012-330	33	K、M	100/0.25	0.068	1870
ZRIP1012-390	39		100/0.25	0.076	1680
ZRIP1012-470	47		100/0.25	0.085	1500
ZRIP1012-560	56		100/0.25	0.094	1440
ZRIP1012-680	68		100/0.25	0.103	1280
ZRIP1012-820	82		100/0.25	0.125	1200
ZRIP1012-101	100		100/0.25	0.170	1100
ZRIP1012-121	120		100/0.25	0.186	930
ZRIP1012-151	150		100/0.25	0.210	840
ZRIP1012-181	180		100/0.25	0.235	810
ZRIP1012-221	220		100/0.25	0.300	725
ZRIP1012-471	470		100/0.25	0.668	500
ZRIP1012-681	680		100/0.25	1.080	390

Note: When ordering, please specify tolerance code. Tolerance: K: ±10%, M: ±20%;

1. Operating temperature range -40 -125°C

2. Isat for Inductance drop 30% from its value without current

3. The products can be customized according to customer requiremen.

● **ZRIP1014 TYPE**

Part Number	Inductance (uH)	Tolerance	Test condition (MHz/V)	DCR Max(Ω)	Rated Current Max (mA)
ZRIP1014-100	10	K、M	100/0.25	0.029	4500
ZRIP1014-120	12		100/0.25	0.031	4000
ZRIP1014-180	18		100/0.25	0.054	3200
ZRIP1014-220	22		100/0.25	0.060	3200
ZRIP1014-270	27		100/0.25	0.065	2700
ZRIP1014-330	33		100/0.25	0.070	2400
ZRIP1014-390	39		100/0.25	0.078	2250
ZRIP1014-470	47		100/0.25	0.086	2100
ZRIP1014-560	56		100/0.25	0.094	1900
ZRIP1014-680	68		100/0.25	0.102	1750
ZRIP1014-820	82		100/0.25	0.124	1650



Part Number	Inductance (uH)	Tolerance	Test condition (MHz/V)	DCR Max(Ω)	Rated Current Max (mA)
ZRIP1014-101	100	K、M	100/0.25	0.158	1450
ZRIP1014-121	120		100/0.25	0.220	1250
ZRIP1014-151	150		100/0.25	0.248	1180
ZRIP1014-181	180		100/0.25	0.345	1080
ZRIP1014-221	220		100/0.25	0.440	920
ZRIP1014-471	470		100/0.25	0.902	670
ZRIP1014-681	680		100/0.25	1.330	560

Note: When ordering, please specify tolerance code. Tolerance: K: ±10%、M: ±20%;

1. Operating temperature range -40 -125°C

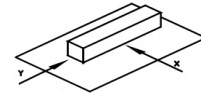
2. Isat for Inductance drop 30% from its value without current

3. The products can be customized according to customer requirements.

DETAIL ELECTRICAL CHARACTERISTICS

1. Operating temperature range: -40 to + 105°C(Includes temperature when the coil is heated) .
2. External appearance: On visual inspection, the coil has no external defects.
3. Terminal strength: After soldering. Between copper plate and terminals of coil. Push in two directions of X.Y

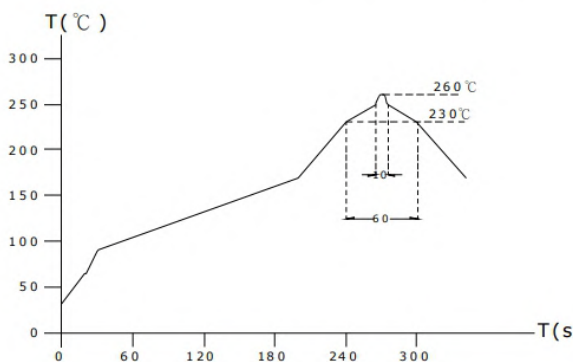
withstanding at below conditions.



Terminal should not peel off. (refer to figure at right) 5. 0N 60 sec.

4. Insulating resistance: Over 100MΩ at 100V D.C. between coil and core.
5. Dielectric strength: No dielectric breakdown at 100V D.C. for 1 minute between coil and core.
6. Temperature characteristics: Inductance coefficient $(0\sim 2,000)\times 10^{-6}/^{\circ}\text{C}$ (-25~+80°C degree Celsius), inductance deviation within $\pm 5.0\%$, after 96 hours.
7. Humidity characteristics(Moisture Resistance): Inductance deviation within $\pm 5\%$, after 96 hours in 90~95% relative humidity at $40 \pm 2^{\circ}\text{C}$ and 1 hour drying under normal condition.
8. Vibration resistance: Inductance deviation within $\pm 5\%$, after vibration for 1 hour. In each of three orientations at sweep vibration (10~55~10 Hz) with 1.5mm P-P amplitudes.
9. Shock resistance: Inductance deviation within $\pm 5\%$, after being dropped once with 981m/s² (100G) shock attitude upon a rubber block method shock testing machine, in three different orientations.
10. Resistance to Soldering Heat: 260°C, 10 seconds(See attached recommend reflow) .
11. Storage condition: Temperature Range: 0°C ~ 35°C; -40°C ~ 105°C (after PCB), Humidity Range: 50% ~ 70% RH.
12. Use components within 12 months. If 12 months or more have elapsed, check solderability before use.
13. Reflow profile recommend:

Lead-free heat endurance test



Lead-free the recommended reflow condition

