

Radial Lead Inductors-RI Series



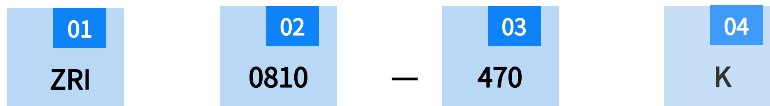
FEATURES

- Ideal as a choke coil for noise filtering.
- Small size radial lead type, With a special base for uniform lead wire.
- Available with or without heat shrink.
- 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



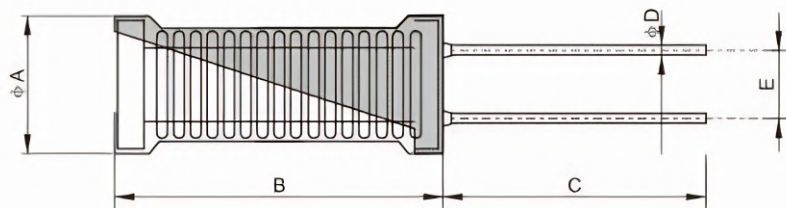
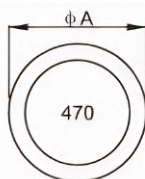
01 Type	
ZRI	Radial Lead Inductor

02 External Dimensions (ΦAxB)(mm)	
0304	5.0x 7.5
0406	6.0x 9.5
0507	7.0x 12.0
0608	8.0x 13.5
0810	9.0x 15.5
0812	9.0x 17.5
0912	11.5x 17.5
1012	12.0x 18.0
1016	12.0x 20.0
1214	15.0x 17.5
1216	15.0x 20.0

04 Nominal Inductance	
Example	Nominal value
4R7	4.7uH
470	47uH
471	470uH

05 Tolerance	
K	±10%
M	±20%
N	±30%

SHAPE AND DIMENSIONS



Part Number	Dimensions(mm)				
	ΦA(MAX)	B(MAX)	C(MAX)	D	E
ZRI0304	5	7.5	According to customer demand	0.50±0.1	1.5±0.5
ZRI0406	6	9.5		0.50±0.1	1.75±0.5
ZRI0507	7	12.0		0.60±0.1	2.5±0.5
ZRI0608	8	13.5		0.65±0.1	3.0±0.5
ZRI0810	9.5	15.5		0.65±0.1	5.0±0.5
ZRI0812	9.5	17.5		0.80±0.1	5.0±0.5
ZRI0912	11.0	17.5		0.80±0.1	5.0±0.5
ZRI1012	12.5	18.0		0.80±0.1	5.0±0.5
ZRI1016	12.5	20.0		0.80±0.1	7.5±0.5
ZRI1214	15.0	17.5		0.80±0.1	7.5±0.5
ZRI1216	15.0	20.0		0.80±0.1	7.5±0.5

SPECIFICATIONS

● ZRI0304 TYPE

Part Number	Inductance (uH)	Tolerance	Test condition (KHz/V)	DCR Max(Ω)	Rated Current Max (mA)
ZRI0304-1R0	1.0	K、M	1/0.25	0.03	2100
ZRI0304-1R5	1.5		1/0.25	0.04	1700
ZRI0304-2R2	2.2		1/0.25	0.05	1400
ZRI0304-2R7	2.7		1/0.25	0.06	1250
ZRI0304-3R3	3.3		1/0.25	0.08	1100
ZRI0304-3R9	3.9		1/0.25	0.09	1000
ZRI0304-4R7	4.7		1/0.25	0.11	950
ZRI0304-5R6	5.6		1/0.25	0.14	850
ZRI0304-6R8	6.8		1/0.25	0.17	750
ZRI0304-8R2	8.2		1/0.25	0.19	700
ZRI0304-100	10		1/0.25	0.23	650
ZRI0304-120	12		1/0.25	0.29	550
ZRI0304-150	15		1/0.25	0.33	500
ZRI0304-180	18		1/0.25	0.42	480
ZRI0304-220	22		1/0.25	0.52	440
ZRI0304-270	27		1/0.25	0.68	400



Part Number	Inductance (uH)	Tolerance	Test condition (KHz/V)	DCR Max(Ω)	Rated Current Max (mA)
ZRI0304-330	33	K、M	1/0.25	0.75	360
ZRI0304-390	39		1/0.25	0.95	330
ZRI0304-470	47		1/0.25	1.35	300
ZRI0304-560	56		1/0.25	1.45	270
ZRI0304-680	68		1/0.25	2.00	250
ZRI0304-820	82		1/0.25	2.20	230
ZRI0304-101	100		1/0.25	3.10	210
ZRI0304-121	120		1/0.25	3.50	190
ZRI0304-151	150		1/0.25	4.05	170
ZRI0304-181	180		1/0.25	4.50	150
ZRI0304-221	220		1/0.25	6.75	140

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.

● **ZRI0406 TYPE**

Part Number	Inductance (uH)	Tolerance	Test condition (KHz/V)	DCR Max(Ω)	Rated Current Max (mA)
ZRI0406-1R0	1.0	K、M	1/0.25	0.022	3200
ZRI0406-1R2	1.2		1/0.25	0.026	3000
ZRI0406-1R5	1.5		1/0.25	0.032	2650
ZRI0406-1R8	1.8		1/0.25	0.035	2400
ZRI0406-2R2	2.2		1/0.25	0.040	2200
ZRI0406-2R7	2.7		1/0.25	0.045	2000
ZRI0406-3R3	3.3		1/0.25	0.050	1850
ZRI0406-3R9	3.9		1/0.25	0.055	1750
ZRI0406-4R7	4.7		1/0.25	0.065	1550
ZRI0406-5R6	5.6		1/0.25	0.070	1450
ZRI0406-6R8	6.8		1/0.25	0.080	1350
ZRI0406-8R2	8.2		1/0.25	0.095	1150
ZRI0406-100	10		1/0.25	0.100	1050
ZRI0406-120	12		1/0.25	0.120	1000



Specifications subject to change without notice. Please check our website for latest information.

Tel:0086-755-61350640 Fax:0086-755-61350641 E-Mail: sales@ZXcompo.com Web:www.zxcompo.com

Part Number	Inductance (uH)	Tolerance	Test condition (KHz/V)	DCR Max(Ω)	Rated Current Max (mA)
ZRI0406-150	15	K、M	1/0.25	0.140	900
ZRI0406-180	18		1/0.25	0.160	800
ZRI0406-220	22		1/0.25	0.220	700
ZRI0406-270	27		1/0.25	0.240	650
ZRI0406-330	33		1/0.25	0.280	600
ZRI0406-390	39		1/0.25	0.350	550
ZRI0406-470	47		1/0.25	0.430	500
ZRI0406-560	56		1/0.25	0.510	450
ZRI0406-680	68		1/0.25	0.650	420
ZRI0406-820	82		1/0.25	0.800	380
ZRI0406-101	100		1/0.25	1.00	340
ZRI0406-121	120		1/0.25	1.25	310
ZRI0406-151	150		1/0.25	1.45	280
ZRI0406-181	180		1/0.25	1.90	250
ZRI0406-221	220		1/0.25	2.45	230
ZRI0406-271	270		1/0.25	2.75	210
ZRI0406-331	330		1/0.25	3.60	190
ZRI0406-391	390		1/0.25	4.00	170
ZRI0406-471	470		1/0.25	5.35	150

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.

● **ZRI0507 TYPE**

Part Number	Inductance (uH)	Tolerance	Test condition (KHz/V)	DCR Max(Ω)	Rated Current Max (mA)
ZRI0507-1R5	1.5	K、M	1/0.25	0.018	3500
ZRI0507-1R8	1.8		1/0.25	0.020	3100
ZRI0507-2R2	2.2		1/0.25	0.026	2800
ZRI0507-2R7	2.7		1/0.25	0.031	2500
ZRI0507-3R3	3.3		1/0.25	0.040	2300
ZRI0507-3R9	3.9		1/0.25	0.045	2100



Part Number	Inductance (uH)	Tolerance	Test condition (KHz/V)	DCR Max(Ω)	Rated Current Max (mA)
ZRI0507-4R7	4.7	K、 M	1/0.25	0.048	1950
ZRI0507-5R6	5.6		1/0.25	0.058	1700
ZRI0507-6R8	6.8		1/0.25	0.066	1600
ZRI0507-8R2	8.2		1/0.25	0.082	1450
ZRI0507-100	10		1/0.25	0.090	1300
ZRI0507-120	12		1/0.25	0.097	1150
ZRI0507-150	15		1/0.25	0.110	1050
ZRI0507-180	18		1/0.25	0.130	1000
ZRI0507-220	22		1/0.25	0.150	900
ZRI0507-270	27		1/0.25	0.190	790
ZRI0507-330	33		1/0.25	0.230	730
ZRI0507-390	39		1/0.25	0.260	670
ZRI0507-470	47		1/0.25	0.330	610
ZRI0507-560	56		1/0.25	0.390	560
ZRI0507-680	68		1/0.25	0.480	510
ZRI0507-820	82		1/0.25	0.580	460
ZRI0507-101	100		1/0.25	0.750	420
ZRI0507-121	120		1/0.25	0.900	380
ZRI0507-151	150		1/0.25	1.15	340
ZRI0507-181	180		1/0.25	1.50	310
ZRI0507-221	220		1/0.25	1.90	280
ZRI0507-271	270		1/0.25	2.15	260
ZRI0507-331	330		1/0.25	2.75	230
ZRI0507-391	390		1/0.25	3.05	210
ZRI0507-471	470		1/0.25	4.00	190
ZRI0507-561	560		1/0.25	4.45	180
ZRI0507-681	680		1/0.25	5.05	160
ZRI0507-821	820		1/0.25	6.75	150
ZRI0507-102	1000		1/0.25	7.55	130

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.



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● ZRI0507 TYPE

Part Number	Inductance (uH)	Tolerance	Test condition (KHz/V)	DCR Max(Ω)	Rated Current Max (mA)
ZRI0608-1R2	1.2	K、M	1/0.25	0.014	4500
ZRI0608-1R5	1.5		1/0.25	0.016	4100
ZRI0608-2R2	2.2		1/0.25	0.021	3200
ZRI0608-2R7	2.7		1/0.25	0.023	2930
ZRI0608-3R3	3.3		1/0.25	0.025	2700
ZRI0608-3R9	3.9		1/0.25	0.029	2500
ZRI0608-4R7	4.7		1/0.25	0.031	2300
ZRI0608-5R6	5.6		1/0.25	0.033	2150
ZRI0608-6R8	6.8		1/0.25	0.035	2000
ZRI0608-8R2	8.2		1/0.25	0.040	1750
ZRI0608-100	10		1/0.25	0.046	1600
ZRI0608-120	12		1/0.25	0.058	1450
ZRI0608-150	15		1/0.25	0.066	1300
ZRI0608-180	18		1/0.25	0.079	1200
ZRI0608-220	22		1/0.25	0.088	1100
ZRI0608-270	27		1/0.25	0.110	950
ZRI0608-330	33		1/0.25	0.130	900
ZRI0608-390	39		1/0.25	0.160	850
ZRI0608-470	47		1/0.25	0.190	750
ZRI0608-560	56		1/0.25	0.220	690
ZRI0608-680	68		1/0.25	0.260	620
ZRI0608-820	82		1/0.25	0.310	570
ZRI0608-101	100		1/0.25	0.370	520
ZRI0608-121	120		1/0.25	0.460	470
ZRI0608-151	150		1/0.25	0.600	420
ZRI0608-181	180		1/0.25	0.700	380
ZRI0608-221	220		1/0.25	0.850	350
ZRI0608-271	270		1/0.25	1.00	310
ZRI0608-331	330		1/0.25	1.14	280
ZRI0608-391	390		1/0.25	1.35	260



Part Number	Inductance (uH)	Tolerance	Test condition (KHz/V)	DCR Max(Ω)	Rated Current Max (mA)
ZRI0608-471	470	K、M	1/0.25	1.65	240
ZRI0608-561	560		1/0.25	2.00	220
ZRI0608-681	680		1/0.25	2.50	200
ZRI0608-821	820		1/0.25	3.10	180
ZRI0608-102	1000		1/0.25	3.90	160
ZRI0608-103	10000		1/0.25	39..0	40

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.

● **ZRI0810 TYPE**

Part Number	Inductance (uH)	Tolerance	Test condition (KHz/V)	DCR Max(Ω)	Rated Current Max (mA)
ZRI0810-2R2	2.2	K、M	1/0.25	0.018	4800
ZRI0810-3R3	3.3		1/0.25	0.020	4300
ZRI0810-3R9	3.9		1/0.25	0.022	3850
ZRI0810-4R7	4.7		1/0.25	0.024	3500
ZRI0810-5R6	5.6		1/0.25	0.027	3250
ZRI0810-6R8	6.8		1/0.25	0.031	2800
ZRI0810-8R2	8.2		1/0.25	0.033	2600
ZRI0810-100	10		1/0.25	0.037	2350
ZRI0810-120	12		1/0.25	0.041	2250
ZRI0810-150	15		1/0.25	0.047	1900
ZRI0810-180	18		1/0.25	0.052	1750
ZRI0810-220	22		1/0.25	0.059	1600
ZRI0810-270	27		1/0.25	0.065	1430
ZRI0810-330	33		1/0.25	0.075	1300
ZRI0810-390	39		1/0.25	0.100	1180
ZRI0810-470	47		1/0.25	0.110	1090
ZRI0810-560	56		1/0.25	0.120	1000
ZRI0810-680	68		1/0.25	0.160	920
ZRI0810-820	82		1/0.25	0.170	820



Part Number	Inductance (uH)	Tolerance	Test condition (KHz/V)	DCR Max(Ω)	Rated Current Max (mA)
ZRI0810-101	100	K、M	1/0.25	0.200	750
ZRI0810-121	120		1/0.25	0.240	690
ZRI0810-151	150		1/0.25	0.320	610
ZRI0810-181	180		1/0.25	0.360	560
ZRI0810-221	220		1/0.25	0.450	510
ZRI0810-271	270		1/0.25	0.550	560
ZRI0810-331	330		1/0.25	0.650	410
ZRI0810-391	390		1/0.25	0.800	380
ZRI0810-471	470		1/0.25	0.900	350
ZRI0810-561	560		1/0.25	1.150	320
ZRI0810-681	680		1/0.25	1.360	290
ZRI0810-821	820		1/0.25	1.650	260
ZRI0810-102	1000		1/0.25	2.000	240

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

1. Operating temperature range -40 -125°C

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● **ZRI0812 TYPE**

Part Number	Inductance (uH)	Tolerance	Test condition (KHz/V)	DCR Max(Ω)	Rated Current Max (mA)
ZRI0812-2R2	2.2	K、M	1/0.25	0.021	7500
ZRI0812-3R3	3.3		1/0.25	0.023	7000
ZRI0812-3R9	3.9		1/0.25	0.026	6500
ZRI0812-4R7	4.7		1/0.25	0.028	6000
ZRI0812-5R	5.6		1/0.25	0.030	5600
ZRI0812-6R8	6.8		1/0.25	0.037	4800
ZRI0812-8R2	8.2		1/0.25	0.039	4500
ZRI0812-100	10		1/0.25	0.044	4000
ZRI0812-120	12		1/0.25	0.047	3750
ZRI0812-150	15		1/0.25	0.055	3250
ZRI0812-180	18		1/0.25	0.060	2950
ZRI0812-220	22		1/0.25	0.065	2750



Part Number	Inductance (uH)	Tolerance	Test condition (KHz/V)	DCR Max(Ω)	Rated Current Max (mA)
ZRI0812-270	27	K、M	1/0.25	0.076	2450
ZRI0812-330	33		1/0.25	0.083	2200
ZRI0812-390	39		1/0.25	0.095	2000
ZRI0812-470	47		1/0.25	0.120	1850
ZRI0812-560	56		1/0.25	0.140	1700
ZRI0812-680	68		1/0.25	0.170	1550
ZRI0812-820	82		1/0.25	0.190	1400
ZRI0812-101	100		1/0.25	0.220	1250
ZRI0812-121	120		1/0.25	0.260	1180
ZRI0812-151	150		1/0.25	0.350	1050
ZRI0812-181	180		1/0.25	0.390	950
ZRI0812-221	220		1/0.25	0.600	850
ZRI0812-271	270		1/0.25	0.620	750
ZRI0812-331	330		1/0.25	0.750	700
ZRI0812-391	390		1/0.25	0.900	650
ZRI0812-471	470		1/0.25	1.000	600
ZRI0812-561	560		1/0.25	1.250	550
ZRI0812-681	680		1/0.25	1.500	500
ZRI0812-821	820		1/0.25	1.850	450
ZRI0812-102	1000		1/0.25	2.25	400

● ZRI0912 TYPE

Part Number	Inductance (uH)	Tolerance	Test condition (KHz/V)	DCR Max(Ω)	Rated Current Max (mA)
ZRI0912-102	1000	K	1/0.25	1.20	400
ZRI0912-332	3300		1/0.25	5.000	250
ZRI0912-502	5000		1/0.25	7.000	200
ZRI0912-602	6000		1/0.25	7.700	200
ZRI0912-902	9000		1/0.25	10.000	100
ZRI0912-103	10000		1/0.25	11.000	95
ZRI0912-113	11000		1/0.25	12.000	90



● ZRI1012 TYPE

Part Number	Inductance (uH)	Tolerance	Test condition (KHz/V)	DCR Max(Ω)	Rated Current Max (mA)
ZRI1012-330	33	K、M	1/0.25	0.065	3000
ZRI1012-560	56		1/0.25	0.060	2500
ZRI1012-680	68		1/0.25	0.120	1750
ZRI1012-101	100		1/0.25	0.180	1500
ZRI102-221	220		1/0.25	0.400	1500
ZRI1012-331	330		1/0.25	0.550	800
ZRI1012-102	1000		1/0.25	1.5	450
ZRI1012-152	1500		1/0.25	3.2	320
ZRI1012-252	2500		1/0.25	4.0	270
ZRI1012-302	3000		1/0.25	6.0	280
ZRI1012-104	100000		1/0.25	225	50
ZRI1012-504	500000		1/0.25	770	10

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.

● ZRI1016 TYPE

Part Number	Inductance (uH)	Tolerance	Test condition (KHz/V)	DCR Max(Ω)	Rated Current Max (mA)
ZRI1016-9R0	9.0	K、M	1/0.25	0.020	4000
ZRI1016-330	33		1/0.25	0.075	3000
ZRI1016-161	160		1/0.25	0.220	2000
ZRI1016-441	440		1/0.25	0.600	1000
ZRI1016-142	1400		1/0.25	1.2	600
ZRI1016-152	1500		1/0.25	1.8	400
ZRI1016-252	2500		1/0.25	2.4	385
ZRI1016-302	3000		1/0.25	3.5	300
ZRI1016-682	6800		1/0.25	7.0	250

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.



● ZRI1214 TYPE

Part Number	Inductance (uH)	Tolerance	Test condition (KHz/V)	DCR Max(Ω)	Rated Current Max (mA)
ZRI1214-101	100	K、M	1/0.25	0.250	3500
ZRI1214-151	150		1/0.25	0.231	3500
ZRI1214-471	470		1/0.25	0.750	2000

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.

● ZRI1216 TYPE

Part Number	Inductance (uH)	Tolerance	Test condition (KHz/V)	DCR Max(Ω)	Rated Current Max (mA)
ZRI1216-101	100	K、M	1/0.25	0.020	4000
ZRI1216-221	220		1/0.25	0.075	3000
ZRI1216-681	680		1/0.25	0.220	2000

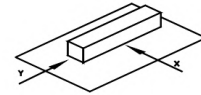
Note: When ordering, please specify tolerance code. Tolerance: K: ±10%、M: ±20%;

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

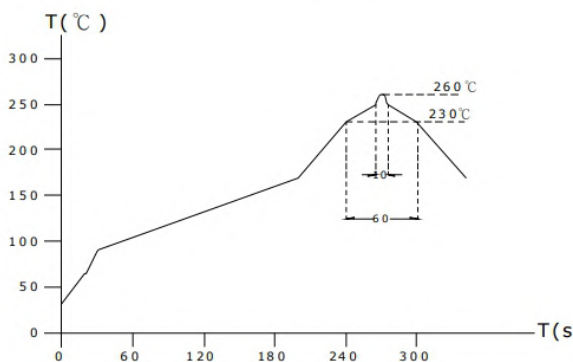
withstanding at below conditions.



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

