Radial Power Inductors-RID Series

FEATURES

- Entrie winding core is encapsulated in heat shriked UL tube or magnetically shielded.
- To provide mechanical and environmental protection.
- With a special base for uniform lead wire.
- Low impedance 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	02		03	04
RID	0606	—	4R7	M

01

TyPe	
RID	Radial Power Inductor

02

External Dimensions (ΦAxB)(mm)	
0606	6.5x 6.5
0807	8.3x 7.5

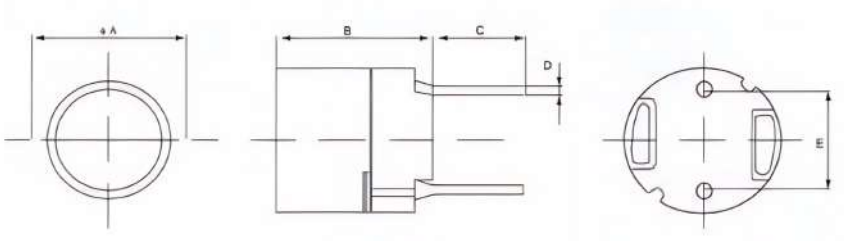
03

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

04

Tolerance	
K	±10%
M	±20%
N	±30%

SHAPE AND DIMENSIONS



Part Number	Dimensions(mm)				
	ΦA(MAX)	B(MAX)	C(MAX)	D	E
RID0606	6.5	6.5	4.0	0.50±0.1	4.0±0.5
RID0807	8.3	7.5	5.5	0.65±0.1	5.0±0.5

Note: The products can be customized according to customer requirement

SPECIFICATIONS

● RID0606 TYPE

Part Number	Inductance (uH)	Tolerance	Test condition (KHz/V)	DCR Max(Ω)	Rated Current Max (A)
RID0606-1R2	1.2		1/0.25	0 .042	2 .40
RID0606-1R8	1.8		1/0.25	0 .045	2.23
RID0606-2R2	2.2		1/0.25	0 .047	2.10
RID0606-2R7	2.7		1/0.25	0 .050	2.00
RID0606-3R3	3.3		1/0.25	0 .062	1.80
RID0606-4R7	4.7		1/0.25	0 .071	1.47
RID0606-6R8	6.8		1/0.25	0 .092	1.18
RID0606-8R2	8.2		1/0.25	0 .105	1.12
RID0606-100	10		1/0.25	0 .118	1.00
RID0606-120	12		1/0.25	0 .130	0 .96
RID0606-150	15		1/0.25	0 .180	0 .87
RID0606-180	18		1/0.25	0. 210	0 .78
RID0606-220	22	K、M	1/0.25	0 .260	0 .72
RID0606-330	33		1/0.25	0 .330	0.60
RID0606-390	39		1/0.25	0 .360	0 .55
RID0606-470	47		1/0.25	0 .390	0 .50
RID0606-560	56		1/0.25	0 .540	0 .45
RID0606-680	68		1/0.25	0 .620	0 .41
RID0606-820	82		1/0.25	0 .720	0 .37
RID0606-100	100		1/0.25	0 .880	0 .34
RID0606-121	120		1/0.25	0 .990	0 .30
RID0606-151	150		1/0.25	1 .520	0 .27
RID0606-181	180		1/0.25	1 .700	0 .25
RID0606-221	220		1/0.25	1 .850	0 .23
RID0606-271	270		1/0.25	2 .850	0 .21

Note：When ordering,please specify tolerance code.Tolerance: K: ±10%、M: ±20%;
1.Operating temperature range -40 -125**℃**
2.Isat for Inductance drop 30% from its value without current
3.The products can be customized according to customer requiremen.

● RID0807 TYPE

Part Number	Inductance (uH)	Tolerance	Test condition (KHz/V)	DCR Max(Ω)	Rated Current Max (A)
RID0807-1R2	1.2	K、M	1/0.25	0 .018	4.10
RID0807-1R8	1.8		1/0.25	0 .023	3.75
RID0807-2R2	2.2		1/0.25	0 .025	3.45
RID0807-2R7	2.7		1/0.25	0 .026	3.55
RID0807-3R3	3.3		1/0.25	0 .030	3.19
RID0807-4R7	4.7		1/0.25	0 .035	2.92
RID0807-6R8	6.8		1/0.25	0 .043	2.65
RID0807-8R2	8.2		1/0.25	0 .047	2.55
RID0807-100	10		1/0.25	0 .050	2.40
RID0807-120	12		1/0.25	0 .055	2.25
RID0807-150	15		1/0.25	0 .062	1.95
RID0807-180	18		1/0.25	0. 072	1.78
RID0807-220	22		1/0.25	0 .080	1.60
RID0807-330	33		1/0.25	0 .140	1.30
RID0807-390	39		1/0.25	0 .150	1.20
RID0807-470	47		1/0.25	0 .170	1.10
RID0807-560	56		1/0.25	0 .190	0.99
RID0807-680	68		1/0.25	0 .210	0 .89
RID0807-820	82		1/0.25	0 .270	0 .81
RID0807-100	100		1/0.25	0 .320	0 .74
RID0807-121	120		1/0.25	0 .360	0 .67
RID0807-151	150		1/0.25	0.510	0 .60
RID0807-181	180		1/0.25	0.570	0 .55
RID0807-221	220		1/0.25	0.760	0 .50
RID0807-271	270		1/0.25	0.860	0 .45

Note：When ordering,please specify tolerance code.Tolerance: K: ±10%、M: ±20%;
1.Operating temperature range -40 -125**℃**
2.Isat for Inductance drop 30% from its value without current
3.The products can be customized according to customer requiremen.

DETAIL ELECTRICAL CHARACTERISTICS

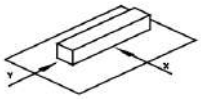
1. Operating temperature range: -40 to + 105°C(Includes temperature when the coil is heated) .

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 (0~2,000)x10-6/°C(-25~+80°C degree Celsius), inductance deviation within±5.0%, after 96 hours.

7. Humidity characteristics(Moisture Resistance): Inductance deviation within ±5%, after 96 hours in 90~95% relative humidity at 40 ±2°Cand 1 hour drying under normal condition.

8. Vibration resistance: Inductance deviation within ±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 ±5%, after being dropped once with 981m/s2 (100G) shock attitude upon a rubber block method shock testing machine, in three different orientations.

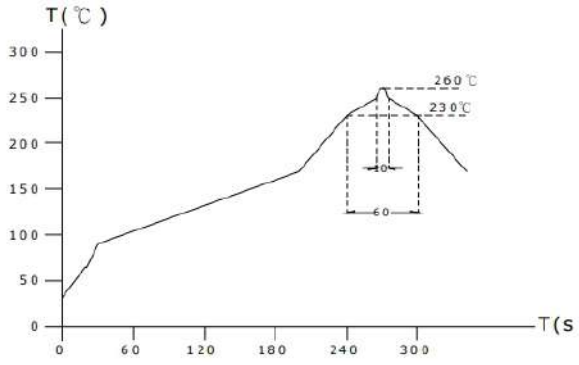
10. Resistance to Soldering Heat: 260°C, 10 seconds(See attached recommend reflow) .

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