

3 Pin Radial Inductors—RIT Series



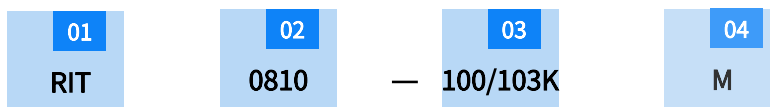
FEATURES

- 3 Pin radial inductor
- Contain high-frequency ferrite.
- Comparatively large rate current.
- Large inductance with low DCR.

APPLICATIONS

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

PRODUCT IDENTIFICATION



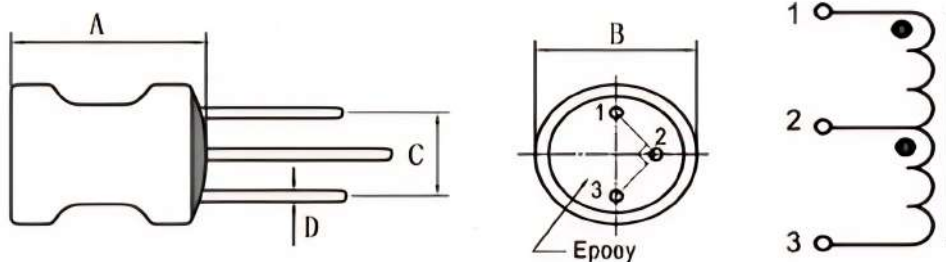
| 01 Type | |
|---------|-----------------------|
| RIT | Radial Power Inductor |

| 02 External Dimensions (ΦAxB)(mm) | |
|-----------------------------------|------------|
| 0507 | 10.0x 6.5 |
| 0608 | 11.0x 7.5 |
| 0810 | 13.5x 9.5 |
| 0912 | 15.0x 10.5 |
| 1012 | 16.0x 11.5 |
| 1016 | 20.0x 12 |

| 03 Nominal Inductance | |
|-----------------------|-----------------------|
| Example | Nominal value |
| 100/103 | L1-L2:10uH,L3-L2:10mH |
| 102/104 | L1-L2:1mH,L3-L2:100mH |

| 04 Tolerance | |
|--------------|------|
| K | ±10% |
| M | ±20% |
| N | ±30% |

SHAPE AND DIMENSIONS



| Part Number | Dimensions(mm) | | | |
|-------------|----------------|--------|---------|----------|
| | ΦA(MAX) | B(MAX) | C(MAX) | D |
| RIT0507 | 10.0 | 6.5 | 2.5±0.5 | 0.60±0.1 |
| RIT0608 | 11.0 | 7.5 | 3.0±0.5 | 0.65±0.1 |
| RTI0810 | 13.5 | 9.5 | 4.0±0.5 | 0.65±0.1 |
| RIT0912 | 15.0 | 10.5 | 5.0±0.5 | 0.65±0.1 |
| RIT1012 | 16.0 | 11.5 | 6.0±0.5 | 0.80±0.1 |
| RIT1016 | 20.0 | 12.0 | 6.0±0.5 | 0.80±0.1 |

Note: The products can be customized according to customer requirement

SPECIFICATIONS

| Part Number | Inductance (uH) | Tolerance | Test condition (KHz/V) | DCR Max(Ω) | Rated Current Max (mA) |
|-------------|-----------------|-----------|------------------------|------------|------------------------|
| RIT0507 | 1uh-80mH | K、 M | 1/0.25 | 0.001-100 | 1-4000 |
| RIT0608 | 1uh-100mH | K、 M | 1/0.25 | 0.001-200 | 1-5000 |
| RIT0810 | 1uh-200mH | K、 M | 1/0.25 | 0.001-400 | 1-8000 |
| RIT0912 | 1uh-200mH | K、 M | 1/0.25 | 0.001-400 | 1-9000 |
| RIT1012 | 1uh-300mH | K、 M | 1/0.25 | 0.001-400 | 1-9000 |
| RIT1016 | 1uh-300mH | K、 M | 1/0.25 | 0.001-400 | 1-9000 |

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

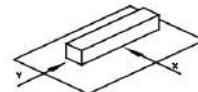
1. Operating temperature range -40 -125°C
2. Isat for Inductance drop 30% from its value without current
3. The products can be customized according to customer requiremen.



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

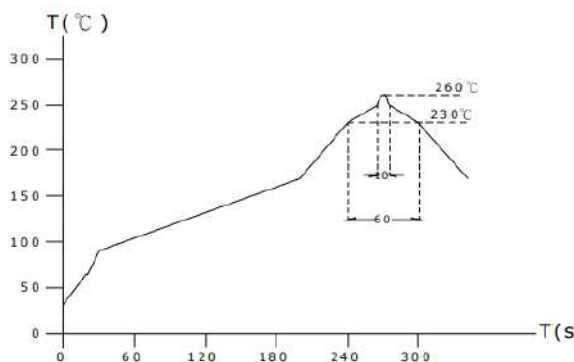
withstanding at below conditions.



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

