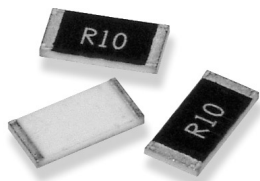


Type RL73 Series

Type RL73 Series



Tyco are pleased to offer this thick film chip resistor for current sensing positions. It has a special metal glaze resistive element and a nickel barrier layer beneath the solder to prolong terminal life. Following the developments by semiconductor manufacturers in the production of a range of IC's for battery charge management and low voltage power supplies, the RL73 Series satisfies the demand for a low ohmic shunt resistor to act as a current sensor.

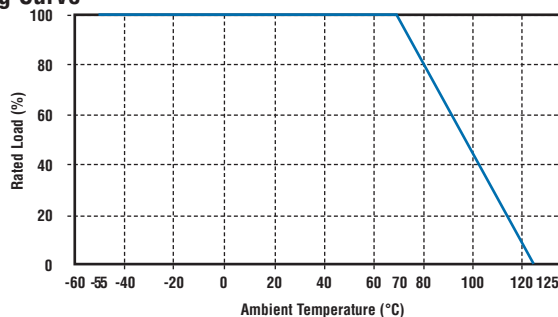
Key Features

- Up to 1 Watt at 70°C
- Values Down to R10
- 7 Chip Sizes
- Ideal for Current Detection
- Value Marked on Resistor
- Lab Kits Available on Request
- Sizes 0402 to 2512
- 0402, 0603, 0805, 1206, 2512 stocked in Distribution

Characteristics - Electrical

| Type | T.C.R. | Power Rating @ 70°C | Max. Working Voltage | Max. Overload Voltage | Resistance Range | | Taping & Qty Per 7" Reel | | |
|----------|--------|---------------------|----------------------|-----------------------|-------------------|--------------------|--------------------------|------|------|
| | | | | | *F(±1%), E96, E24 | G(±2%), J(±5%) E24 | TP | TD | TE |
| RL73N1E | ± 300 | 0.10W | - | - | - | R20 - R91 | 10000 | - | - |
| RL73N1J | ± 300 | | | | - | R20 - R91 | | | |
| RL73H2A | ± 100 | 0.125W | 1.11V | 2.79V | R20-10R | - | - | 5000 | - |
| RL73K2A | ± 200 | | | | - | R10-10R | | | |
| RL73H2B | ± 100 | 0.25W | 1.58V | 3.95V | R20-10R | - | - | 5000 | - |
| RL73K2B | ± 200 | | | | - | R10-10R | | | |
| RL73H2E | ± 100 | 0.5W | 2.23V | 5.59V | R20-10R | - | - | 5000 | - |
| RL73K2E | ± 200 | | | | - | R10-10R | | | |
| RL73H2H | ± 100 | 0.75W | 2.73V | 6.84V | R20-10R | - | - | - | 4000 |
| RL73K2H | ± 200 | | | | - | R10-10R | | | |
| RL73H3A | ± 100 | 1.0W | 3.16V | 7.90V | R20-10R | - | - | - | 4000 |
| *RL73K3A | ± 200 | | | | - | R10-10R | | | |

Power Derating Curve

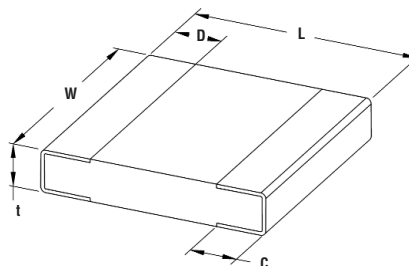


If this device is expected to run at full continuous power then action to improve the cooling should be taken. This can be a metal substrate, copper pad left under the chip, an opening in the PCB or extra large solder pads.

*** Recommended Circuit Board Design**

For resistors operated in ambient temperatures above 70°C, power rating must be derated in accordance with this curve.

Dimensions



| Part Number | L±0.2 | W | C | D ^{+0.2} _{0.1} | t±0.1 |
|-------------|-------|-----------|-----------|----------------------------------|-------|
| RL73 1E | 1.0 | 0.5 ±0.05 | 0.25 ±0.1 | 0.2 ±0.1 | 0.35 |
| RL73 1J | 1.6 | 0.8 ±0.15 | 0.3 ±0.1 | 0.3 ±0.2 | 0.45 |
| RL73 2A | 2.0 | 1.25±0.1 | 0.4±0.2 | 0.3 | 0.5 |
| RL73 2B | 3.2 | 1.6±0.2 | 0.5±0.3 | 0.4 | 0.6 |
| RL73 2E | | 2.6±0.2 | | | |
| RL73 2H | 5.0 | 2.5±0.2 | | | |
| RL73 3A | 6.3 | 3.1±0.2 | | | |

How to Order

| RL73K | 3A | R10 | J | TE |
|---|---------------------------|--|---|--|
| Common Part | Rated Power | Resistor Value | Tolerance | Packaging |
| RL73K - Standard * RL73H - 100ppm/°C * See table Above RL73N - 300ppm/°C | See Above e.g. 3A - 1W | 0.1 Ohm (100 milli Ohm) R10 1 Ohm (1000 milli Ohm) 1R0 10 Ohm (10000 milli ohm) 10R | J ±5% G ±2% *F ±1% * See Table Above | TE - 4000 (RL73_3A, RL73_2H Only) TD - 5000 (RL73_2A, RL73_2B, RL73_2E Only) TP - 10,000 (RL73_1E, RL73_1J Only) |