

Type TL Series

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Tyco are pleased to offer this unique High Power, metal chip resistor for current sensing positions. It has a special metal resistive element and suitable barrier layers 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 TL Series satisfies the demand for a low ohmic shunt resistor to act as a current sensor. It has particular applications in the automotive industry for sensing in EMU's.

Key Features

- Up to 1 Watt at 70°C
- Supplied on Tape
- Ideal for Current Detection
- Wide Value Range R001 to 1R0 Possible
- Fully Automated Manufacture
- 12:06, 20:10 and 25:12 Packages Available
- Available in Distribution

Characteristics - Electrical

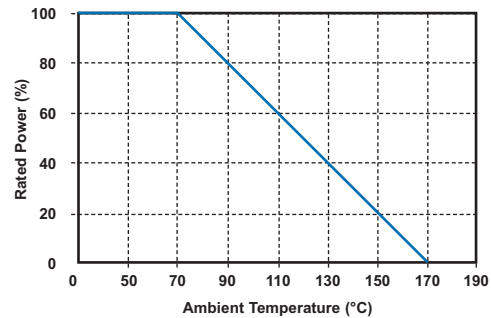
| | 1206 | 2010 | 2512 |
|-------------------------|--|----------|----------|
| Resistance Value Range: | R003-R20 | R003-R50 | R001-R50 |
| Resistance Tolerance: | ± 1% | | |
| Power Rating: | Up to 1 watt at 70°C derating to zero at 170°C | | |
| Operating Temperature: | -65°C to +170°C | | |
| Inductance: | < 5 NanoHenries | | |
| T.C.R. | ±75ppm/°C (R007-R20/R50) | | |

Characteristics - Mechanical

| | |
|--------------------|----------------------|
| Body Construction: | Fully Welded Element |
| Terminations: | 100% Tin |
| Coating: | Epoxy |

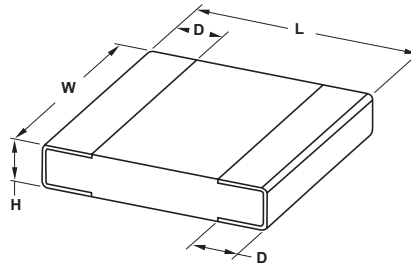
Power Derating Curve

| Type | Power Rating |
|-------|--------------|
| TL2B | 0.25 Watts |
| TL2H* | 0.5 Watts |
| TL3A | 1.0 Watts |



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

Dimensions



| Type | L | W | H | D |
|-------|-----|-----|-----|-----|
| TL2B | 3.2 | 1.6 | 0.6 | 0.5 |
| TL2H* | 5.1 | 2.5 | 0.6 | 0.5 |
| TL3A | 6.4 | 3.2 | 0.6 | 0.8 |

How to Order

| TL | 3A | R015 | F | TE |
|--------------------|---|---|------------------|---|
| Common Part | Power Ratings | Resistance Value | Tolerance | Packaging |
| TL - Standard Part | 2B - 12:06 *2H - 20:10 3A - 25:12 | 0.005 ohm (5 milli ohm) R005 0.015 ohm (15 milli ohms) R015 0.047 ohm (47 milli ohms) R047 | F - ±1% | TE - 4000 per Reel TDG - 2000 per Reel (2512 only) |

* - 20:10 available by special request. Minimum Orders of 10000 pcs to apply