SMD Low Ohmic - Current Sense Resistors

Type TL Series

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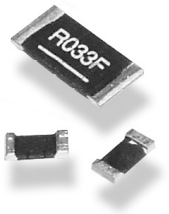


Tyco are pleased to offer this unique High Power, metal chip resistor for current sensing positions. It has a special metal resistive element and suitable barrier layers beneath the solder to prolong terminal life. Following the developments by semiconductor manufacturers in the production of a range 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

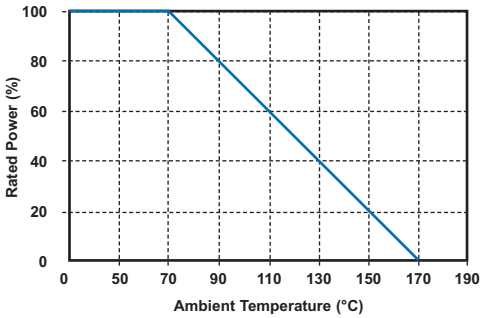
	1206	2010	2512
Resistance Value Range:	R003-R20	R003-R50	R001-R50
Resistance Tolerance:	± 1%		
Power Rating:	Up to 1 watt at 70°C derating to zero at 170°C		
Operating Temperature:	-65°C to +170°C		
Inductance:	< 5 Nanohenries		
T.C.R.	±75ppm/°C (R007-R20/R50)		

Characteristics - Mechanical

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

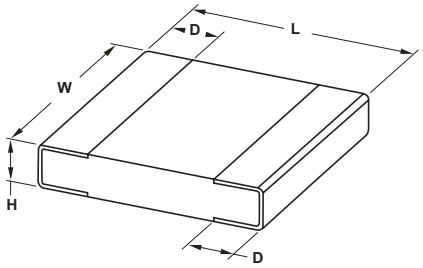
Power Derating Curve

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

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Dimensions are shown for reference purposes only.

Dimensions are in millimetres unless otherwise specified.

Specifications subject to change.