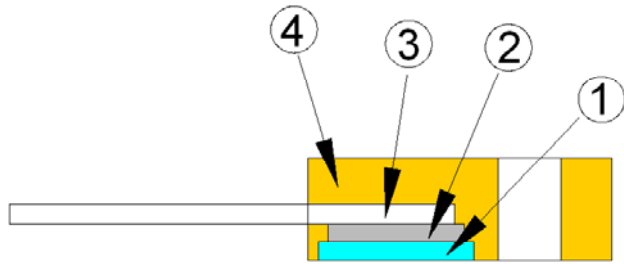


TO-247 Power Resistor – TR100



Construction



① Alumina Substrate	③ Lead
② Resistor Layer	④ Molding

Features

- 100 Watts at 25°C case temperature heat sink mounted
- TO-247 style power package
- Single M3 screw mounting to heat sink
- Molded case for protection and easy to mount
- Electrically isolated case
- Non-Inductive design

Applications

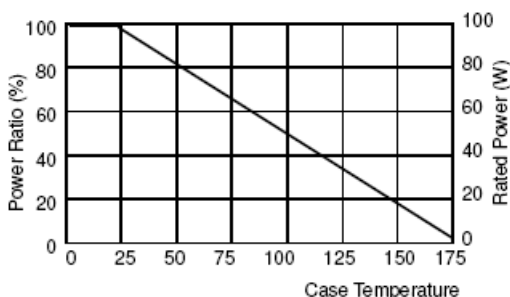
- Gate Resistors in Power Supplies
- Snubbers
- Load and Dumping Resistors in CRT Monitors
- Terminal Resistance in RF Power Amplifier
- Voltage Regulation
- Low Energy Pulse Loading
- UPS

Electrical Characteristics Specifications

Item Type	Resistance Range			TCR (PPM/°C)
	±1%	±5%	±10%	
TR100	-	0.05Ω -1Ω		No Specified
		>1Ω -3Ω		±300
		>3Ω -10Ω		±100 ±200
		>10Ω -10KΩ		±50 ±100 ±200

- Operating Voltage: 700V Max.
- Dielectric Strength: 1800V AC
- Insulation Resistance: 10GΩ min.
- Working Temperature Range: -65°C to +175°C

Derating Curve



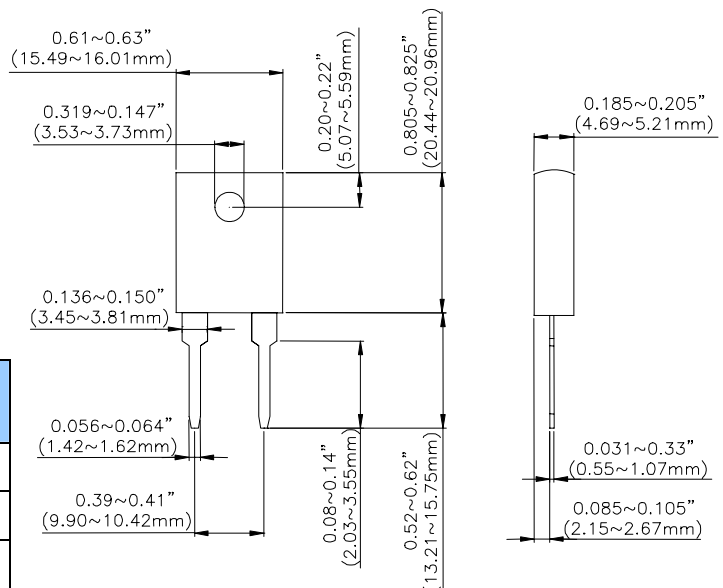
Part Numbering

TR Product Type	100 Power 100: 100 Watts	J Resistance Tolerance F: ±1% J: ±5% K: ±10%	B Packaging Code B: Bulk	D TCR (PPM/°C) D: ±50 E: ±100 F: ±200 G: ±300 - : No Specified	1001 Resistance R100: 0.1Ω 0100: 10Ω 4700: 470Ω 1001: 1000Ω 1002: 10000Ω
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Dimensions

Unit: mm

Type	Weight (g) (1000pcs)
TR100	3381



■ Environmental Characteristics

Item	Requirement	Test Method
Temperature Coefficient of Resistance (T.C.R.)	As Spec.	Referenced to 25°C, ΔR taken at +105°C
Load Life	$\Delta R \pm 1.0\%$	Rated power, 2,000 hours
Solderability	90% min. coverage	245±5°C for 3 seconds
Momentary Overload	$\Delta R \pm 0.5\%$	1.5 times rated power and V (dc) $\leq 1.5V$ Max. for 5 seconds
Dielectric strength	$\Delta R \pm 0.15\%$	1800v AC, 60 seconds
Moisture resistance	$\Delta R \pm 0.5\%$	-10°C~+65°C, RH>90%, cycle 240 hours
Thermal Shock	$\Delta R \pm 0.5\%$	-65°C~150°C, 100 cycles
Terminal Strength	$\Delta R \pm 0.2\%$	(Pull Test) 2.4N
Vibration, High Frequency	$\Delta R \pm 0.4\%$	20g peak

- Lead Material: Tinned Copper
- Maximum Torque: 0.9 Nm
- When in Free Air at 25°C, the TR100 is Rated for 3.5W
- The Case Temperature is to be used for the Definition of the Applied Power Limit
- The Case Temperature Measurement must be made with a Thermocouple Contacting the Center of the Component mounted on the Designed Heat Sink
- Thermal Grease should be Applied Properly.