



奇彥企業有限公司

HITANO ENTERPRISE CORP.

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Data Sheet

Customer:	_____
Product:	TO-247 Power Resistors-TR100 Series
Size.:	TR100
Issued Date:	23-Jun-10
Edition:	REV.A5

TO-247 Power Resistor (TR100 Series)

Features

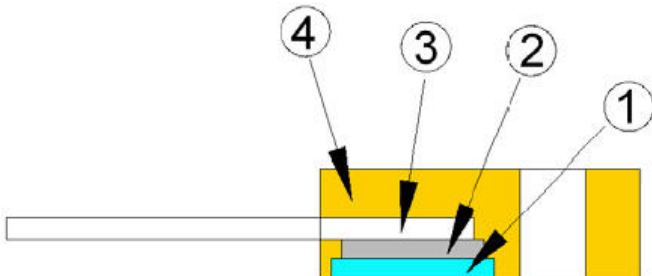
- 100 Watts at $\leq 25^{\circ}\text{C}$ case temperature heat sink mounted
- To-247 style power package
- Single M3 screw on system heat sink
- Molded case for protection and easy to mount
- Electrically isolated case
- Non-Inductive design

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



Construction



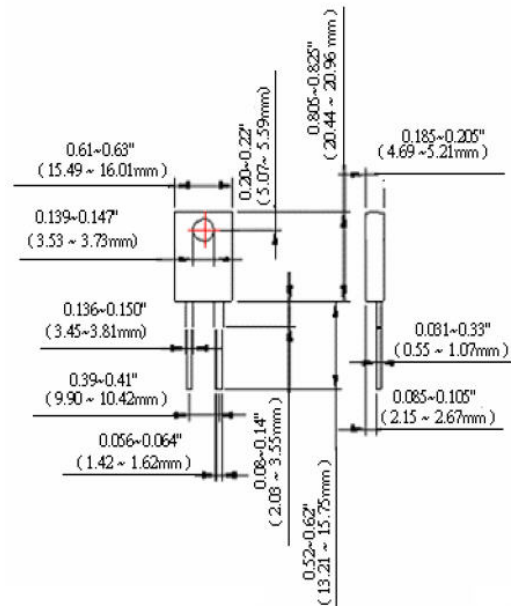
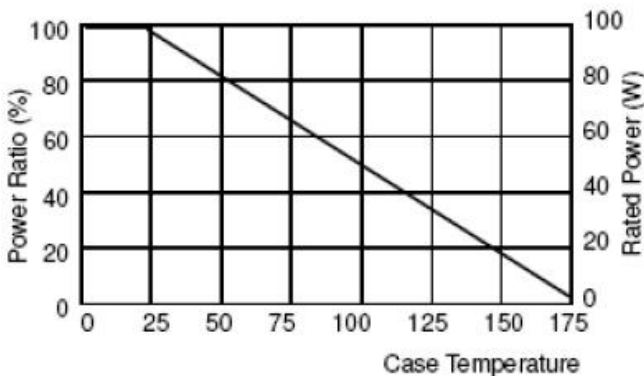
1	Alumina Substrate	3	Lead
2	Resistor Layer	4	Molding

Dimensions

Unit: mm

Type	Weight(g) (1000pcs)
TR100	3381

Derating Curve





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Part Numbering

TR	100	J	B	D	1001
Product Type	Power	Resistance Tolerance	Packaging Code	TCR (PPM/°C)	Resistance
	100:100 Watts	F:±1% J:±5% K:±10%	B: Bulk	D:±50 E:±100 F:±200 G:±300 -:No Specified	R100:0.1Ω 0100:10Ω 4700:470Ω 1001:1000Ω 2R20:2.2Ω 0080: 8Ω

Electrical Characteristics Specifications

Resistance Range	TCR (PPM/°C)		
	±1%	±5%	±10%
>0.05Ω-1Ω	—	—	—
>1Ω-3Ω	±300	±300	±300
>3Ω-10Ω	±100	±100	±100
	±200	±200	±200
>10Ω-10KΩ	±50	±50	±50
	±100	±100	±100
	±200	±200	±200

Operating Voltage: 700V max.

Dielectric Strength: 1800VAC

Insulation Resistance: 10GΩmin

Working Temperature Range: -65°C to +175°C

Environmental Characteristics

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

Lead Material: Tinned Copper

Maximum Torque : 0.9Nm

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