



LIEAN GIMN ENTERPRISE CO., LTD.

Data Sheet

Customer :

Product Type: TO-247 Power Resistors

Part No.: TR100 Series

Issued Date: 31-Oct-08

Document No TR100 Series REV.A1



Produced by (QC)	Checked (QC)	Approved by (QC)	Prepared by (Sales)	Accepted by (Customer)
31-Oct-08	31-Oct-08	31-Oct-08	31-Oct-08	
<i>Kris</i>	<i>Roland</i>	<i>Judy</i>		

TO-247 Power Resistors

(TR100 Series)

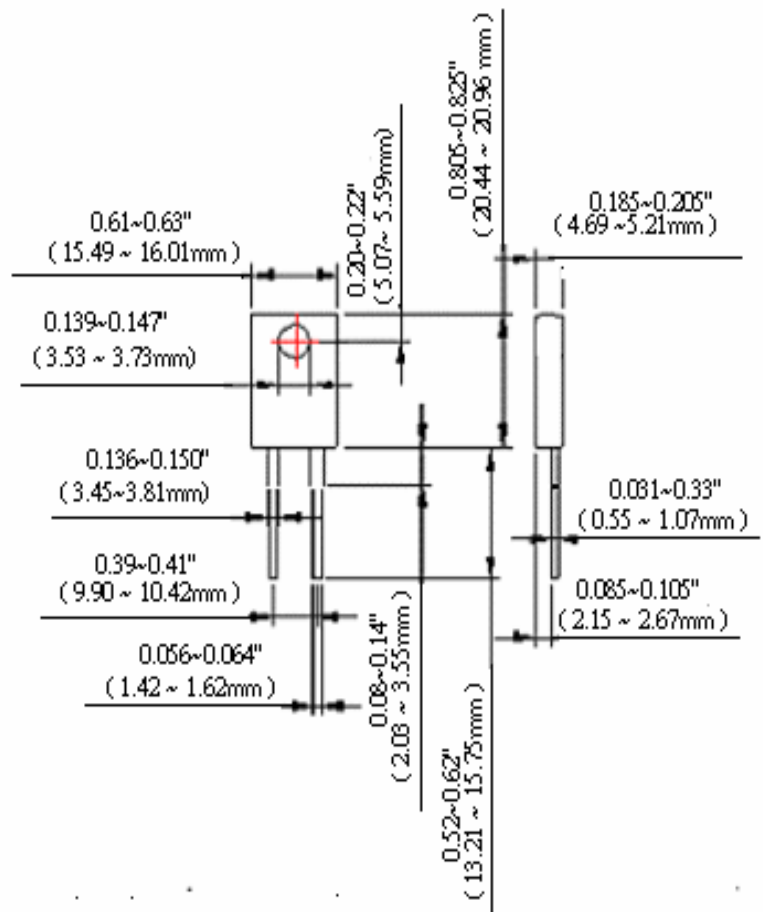
Features:

- 100 Watt 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 Amplifiers.
- Voltage Regulation.
- Low Energy Pulse Loading.
- UPS

Dimensions:



Ordering Information:

TR 100 J B D 1001

(1) (2) (3) (4) (5) (6)

(1)Type: TR=TO-247 Power Resistors

(2)Power : 100=100 Watts

(3)Tolerance: F=1%,G=2%, J=5%, K=10%

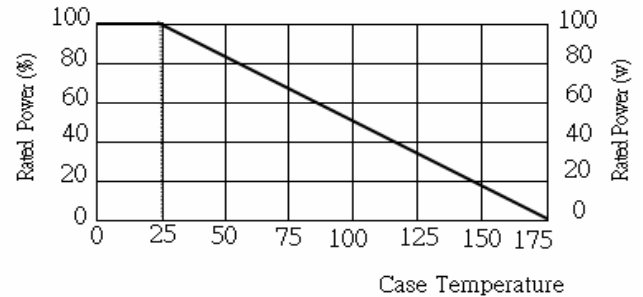
(4) Packaging Style: T=Tube, B=Bulk

(5)TCR: D=±50ppm/°C , E=±100ppm/°C , F=±200ppm/°C , G=±300ppm/°C

(6) Resistance: 1R00=1Ω, 1R10=1.1Ω

0100=10Ω, 4700=470Ω, 1001 =1KΩ, 1002=10KΩ

Derating curve





Electrical Characteristics Specifications:

Resistance Range	Resistance Tolerance	TCR (PPM/°C)
0.1Ω ~ 1Ω	±5% ±10%	-(No specified)
>1Ω ~ 3Ω	±1%	±300
>3Ω ~10Ω	±1% ±5% ±10%	±100 ±200
>10Ω~10KΩ	±1% ±5% ±10%	± 50 ±100 ±200

*** We are Capable of Manufacturing the Following Options Based on Customer's Requirement:**

- Operating Voltage:350V Max.
- Dielectric Strength:1800V AC
- Insulation Resistance: 10GΩ min.
- Working Temperature Range: -65°C to +175°C

Environmental Characteristics:

Test Item	Specification	Test Method
Temperature Coefficient of Resistance	As spec.	Referenced to 25°C, ΔR taken at +105°C
Momentary Overload	ΔR±0.5 %	1.5 times rated power and V(dc) ≤ 1.5Vmax for 5 seconds
Dielectric strength	ΔR±0.15 %	MIL-STD-202F Method 301(1800v AC,60s)
Load Life	ΔR ± 1.0 %	MIL-PRF-39009D,4.8.13 Rated power, 2,000 hours
Moisture resistance	ΔR± 0.5 %	-10°C~+65°C ,RH>90%,cycle 240hours
Thermal Shock	ΔR ± 0.5 %	MIL-STD-202F, Method 107G. -65°C~150°C, 100 cycle
Terminal Strength	ΔR ±0.2 %	MIL-STD-202F, Method 211, Cond. A (Pull Test) 2.4N,
Vibration, High Frequency	ΔR ± 0.4 %	MIL-STD-202F, Method 204, Cond. D,
Solderability	90% Min Coverage	MIL-STD-202F Method 208H 245°C±5°C,3±0.5(sec)

- Lead Material: Tinned Copper.
- 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.