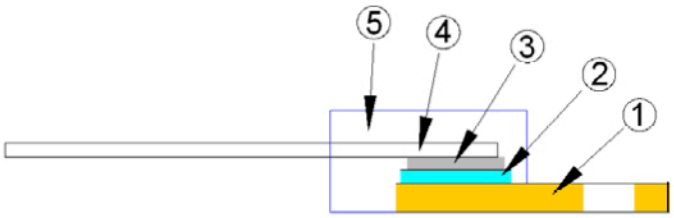
TO-247 Power Resistor - RTR100 Series

Construction and Dimensions



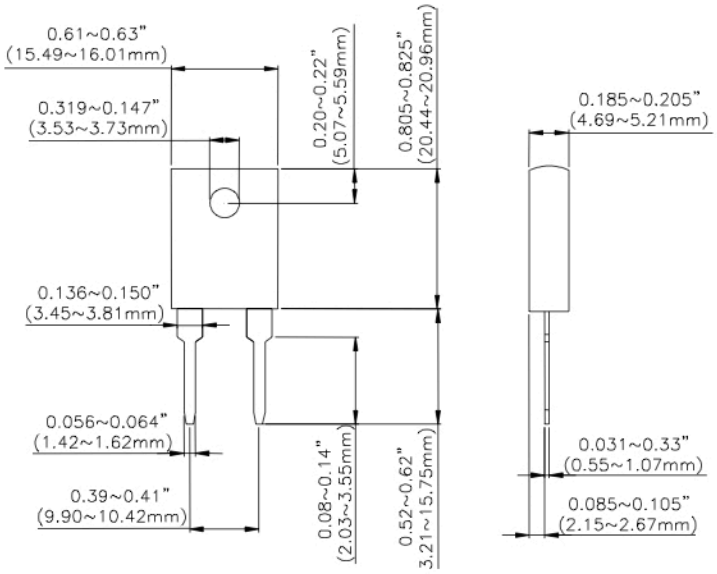
①	Alumina Substrate	③	Lead
②	Resistor Layer	④	Molding

Features

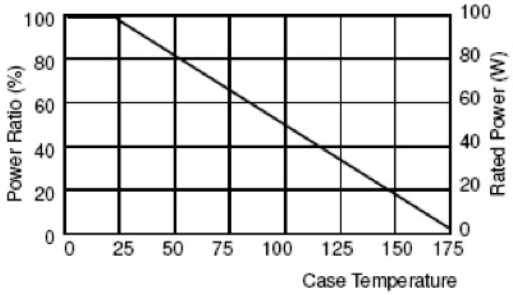
- 100 watts at 25°C case temperature heat sink mounted
- TO-247 style power package
- Single M3 screw mounting to heat sink
- Molded case for protection and easy to mount
- Electrically isolated case
- Non-inductive design

Applications

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



Derating Curve



Type	Weight (g) (1000pcs)
RTR100	3381

Part Numbering

RTR	100	J	1001	B	50
Product Type	Power	Resistance Tolerance	Resistance	Packaging Code	TCR (PPM/°C)
	100: 100 Watts	F: ±1% J: ±5% K: ±10%	R100: 0.1Ω 0100: 10Ω 4700: 470Ω 1001: 1KΩ 1002: 10KΩ	B: Bulk	50: ±50 100: ±100 200: ±200 300: ±300

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■Electrical Characteristics Specifications

Item / Type	Resistance Range			TCR (PPM/°C)
	±1%	±5%	±10%	
RTR100	-	0.05Ω -1Ω		No Specified
	>1Ω -3Ω			±300
	>3Ω -10Ω			±100 ±200
	>10Ω –100KΩ			±50 ±100 ±200

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

■Environmental Characteristics

Item	Requirement	Test Method
Temperature Coefficient of Resistance (T.C.R.)	As Spec.	Referenced to 25℃, ΔR taken at +105℃
Load Life	ΔR±1.0%	Rated power, 2,000 hours
Solderability	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%	1800v 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: 0.9 Nm
- When in Free Air at 25℃, the RTR100 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