T0-220 POWER RESISTOR
- RTR100 SERIES -

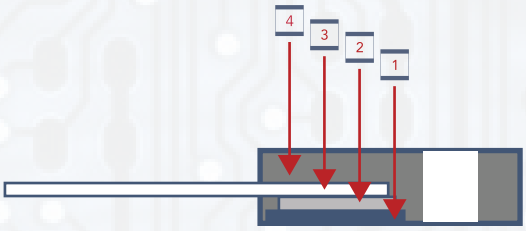
FEATURES

- 100 Watts at 25°C case temperature heat sink mounted
- T0-247 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
- Low Energy Pulse Loading
- UPS

CONSTRUCTION

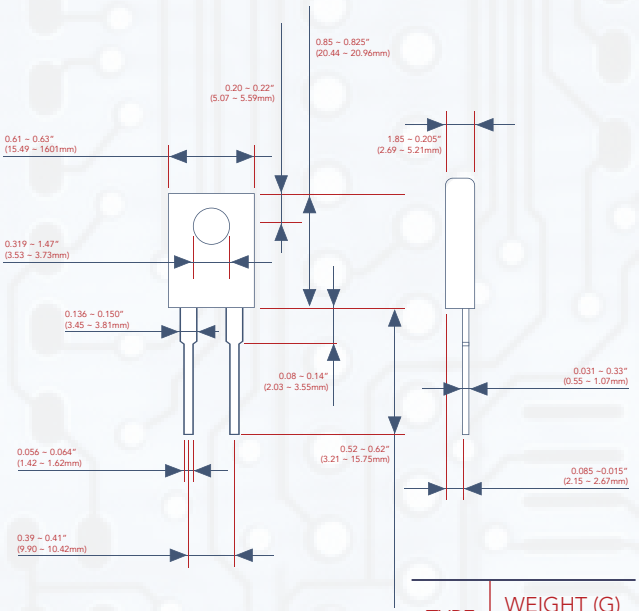


1	Alumnia Substrate	3	Lead
2	Resistor Layer	4	Molding

PART NUMBERING

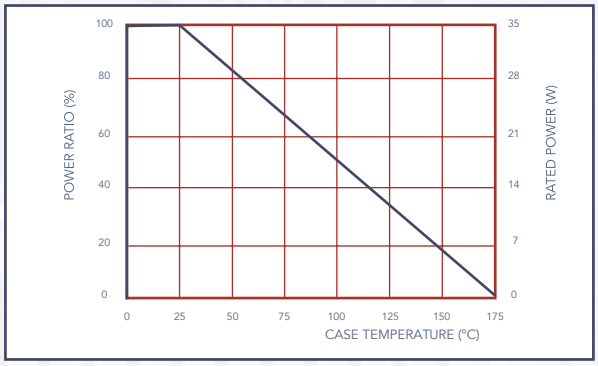
RTR	100	J	1001	T	50
PRODUCT TYPE	POWER	RESISTANCE TOLERANE	RESISTANCE	PACKING CODE	TCR (PPM / °C)
	100: 100 Watts	F: ±1% J: ±5% K: ±10%	R100: 0.1Ω 0100: 10Ω 4700: 470Ω 1001: 1KΩ 1002: 10KΩ	T: Tube	50: ±50 100: ±100 200: ±200 300: ±300

DIMENSIONS



TYPE	WEIGHT (G) (1000 PCS)
RTR100	3381

DERATING CURVE



ELECTRICAL CHARACTERISTICS SPECIFICATIONS

TYPE / ITEM	RESISTANCE RANGE				TCR (PPM/°C)
	±0.5%	±1%	±5%	±10%	
RTR100	-	-	0.05Ω - 1Ω		Not Specified
	-	≥ 1Ω - 5Ω			±100 | ±200 | ±300
	-	≥ 0.1Ω - 1Ω			Not Specified
	-	≥ 5Ω - 10Ω			±100 | ±200 | ±300
	≥ 10Ω - 100KΩ				±50 | ±100 | ±200

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

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	ΔR ± 1.0%	2,000 hours at rated power
Solderability	90% min coverage	245±5°C for 3 seconds
Momentary Overload	ΔR ± 0.5%	1.5 times rated power and V (dc) ≤ 1.5 for 5 seconds
Dielectric Strength	ΔR ± 0.15%	1800c AV, 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

RCWV (Rated Continuous Working Voltage) -$\sqrt{(P*R)}$ or Max. Operating Voltage whichever is lower.

- Lead Material: Tinned Copper
- Maximum Torque: 0.9Nm
- When in Free Air at 25°C, 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.
- Storage Temperature: 25 ± 5°C
- Humidity: <75%RH

MS LEVEL 1

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