

# T0-220 POWER RESISTOR

## - RTR35 SERIES -

### FEATURES

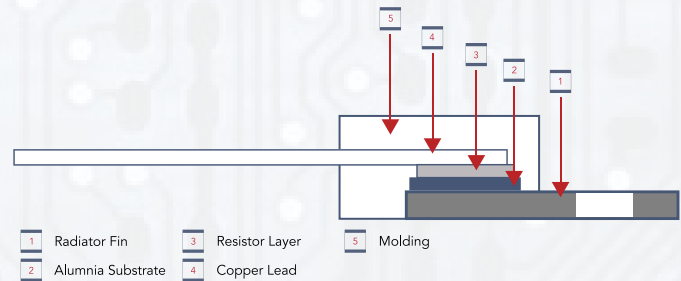
- 35 watts at 25°C case temperature heat sink mounted
- T0-220 style power package
- Single screw mounting to heat sink
- Molded case for protection and easy to mount
- Electrically isolated case
- Non-Inductive design



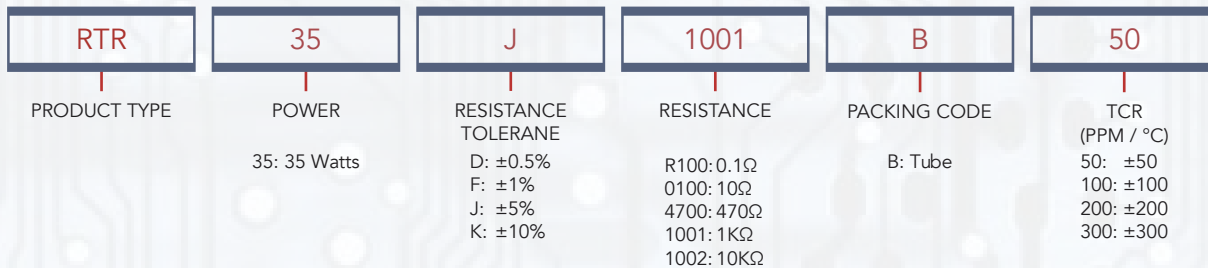
### APPLICATIONS

- Switching Power Supplies
- Snubber Circuits
- Automated Machine Controller
- RF Power Amplifiers
- Low Energy Pulse Loading
- UPS
- Voltage Regulation

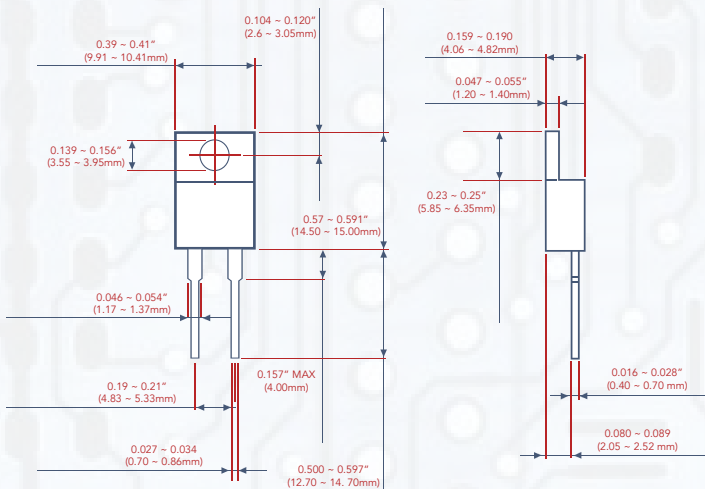
### CONSTRUCTION



### PART NUMBERING

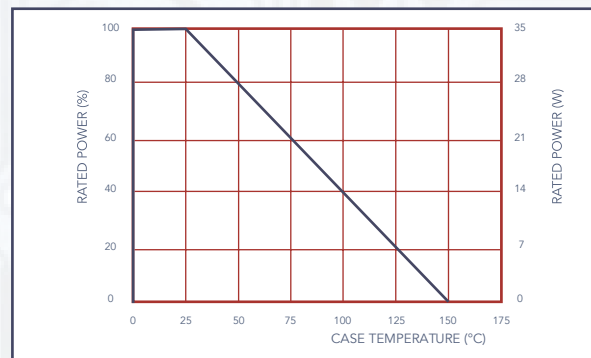


### DIMENSIONS



TYPE	WEIGHT (G) (1000 PCS)
RTR35	1902

### DERATING CURVE



## ELECTRICAL CHARACTERISTICS SPECIFICATIONS

TYPE	ITEM	RESISTANCE RANGE				TCR (PPM/°C)
		±0.5%	±1%	±5%	±10%	
RTR35	-	-	-	0.05Ω - 1Ω		Not Specified
	-	-	≥ 1Ω - 5Ω			± 300
	-	-	≥ 5Ω - 10Ω			±100   ±200
	-	-	≥ 10Ω - 100KΩ			±50   ±100   ±200

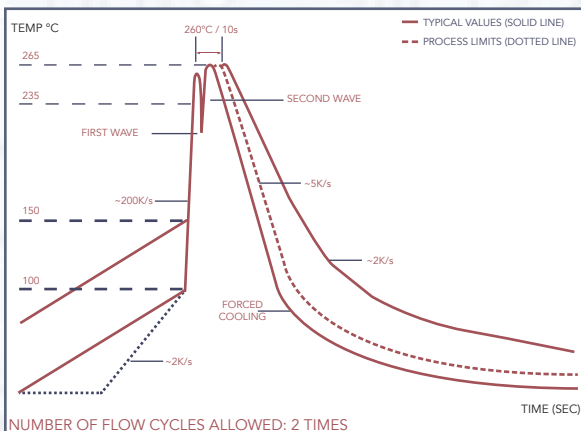
- Operating Voltage: 420 V Max
- Dielectric Strength: 1800VAC
- Insulation Resistance: 10GΩ min.
- Working Temperature Range: -65°C to +150°C
- Resistance Value < 1Ω is available

## ENVIRONMENTAL CHARACTERISTICS

ITEM	REQUIREMENT	TEST METHOD
Temperature Coefficient of Resistance (T.C.R.)	As Spec.	Referenced to 25°C, DR taken at +105°C
Short Time Overload	$\Delta R \pm 0.3\%$	2 times rated power with applied voltage not to exceed 1.5 times maximum continuous operating voltage for 5 seconds
Load Life	$\Delta R \pm 1.0\%$	2,000 hours at rated power
Damp Heat with Load	$\Delta R \pm 0.5$	40±2°C, 90~95% R.H., RCWV for 1000 hrs with 1.5 hrs "ON" and 0.5 hrs "OFF"
Solderability	90% min coverage	245±5°C for 3 seconds
Thermal Shock	$\Delta R \pm 0.3\%$	-65°C ~ 150°C, 100 cycles
Terminal Strength	$\Delta R \pm 0.2\%$	(Pull Test) 2.4N
Vibration, High Frequency	$\Delta R \pm 0.2\%$	20g peak

- Lead Material: Tinned Copper
- Maximum Torque: 0.9N-m
- Without a Heat Sink, When in Free Air at 25° C, the RTR35 is rated for 2.50W
- 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.
- RCWV(Rated continuous working voltage)  $\sqrt{(P \cdot R)}$  or Max. Operating voltage whichever is lower.

## SOLDERING CONDITION



- Wave Soldering (Flow Soldering)
  - (1) Time of wave soldering at maximum temperature point 260°C : 10s
  - (2) Time of soldering iron at maximum temperature point 410°C " 5s

