

### 30 Watts TO-220 High Power Resistors

A high power TO-220 style resistor package designed for high frequency emitter circuits in switching power supplies. Also used in voltage regulation and low energy pulse loading.

### FEATURES

- 30 Watts at 25°C case temperature on heat sink
- Single screw mounting to heat sink
- Moulded case for protection and easy to mount
- Non-inductive design
- Electrically isolated case
- RoHS Compliant



### **CHARACTERISTICS**

Power rating:	2.25 Watts in free air	
Operating voltage:	350V max	
Dielectric strength:	1800Vac	
Insulation resistance:	10GΩ min	
Working temperature range:	-65°C to +150°C	
Temperature coefficient:	As specified, referenced to 25°C, ΔR taken at +105°C	
Short time overload:	$\Delta$ R ±0.3%, 2 times rated power with applied voltage not to exceed 1.5 times maximum continuous operating voltage for 5 seconds	
Load life:	$\Delta R \pm 1.0\%$ , 2000 hours at rated power	
Damp heat with load:	$\Delta R$ ±0.5%, 40°C, 90 - 95% R.H max working voltage for 1000 hours with 1.5 hours "ON" and 0.5 hours "OFF"	
Solderability:	90% min coverage, 245 ±5°C for 3 seconds	
Thermal shock:	ΔR ±0.3%, -65°C - 150°C, 100 cycles	
Terminal strength:	ΔR ±0.2%, 2.4 N	
Vibration and high frequency:	ΔR ±0.2%, 20g peak	

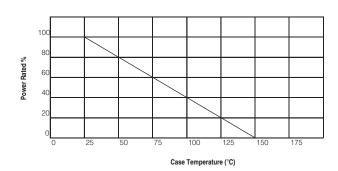
### **Electrical Specifications**

Resistance Value Range	Available Tolerance & Pref. Value Ranges	Available TCR
R05 - 1R	J (±5%) K (±10%)	Not specified
1R02 - 3R	— F (±1%) , J (±5%) , K (±10%)	±300ppm/°C
3R01 - 10R		±100ppm/°C ±200ppm/°C
10R2 - 10K	D (±0.5%) F (±1%) J (±5%) K (±10%)	±50ppm/°C ±100ppm/°C ±200ppm/°C

#### Preferred value ranges:

F (±1%) - E96 , J (±5%) - E24, K (±10%) - E12

## **Derating Curve**



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(mm)

