## FEATURES

- 70 Watt power rating at 25°C case temperature
- Non-inductive performance
- · Low thermal resistance
- RoHS compliant design
- Two or three terminal versions available
- · Heat sink can be grounded through middle terminal (P style)

## SPECIFICATIONS

## Material

Resistor: thick film on alumina Lead: solder coated phosphor

bronze Solder: 100% Sn

Case: high temperature plastic

P Package: middle terminal is electrically connected to header and insulated from left and right terminals

M Package: no middle terminal

#### **Electrical**

Derating: linear, 100% at 25°C to

0% at 150°C

Resistance range:  $2\Omega$ -10K $\Omega$ Max. working voltage: 500V or

Ohm's Law limited Thermal Resistance: 1.79°C/W

**Temperature Coefficient:**  $2\Omega$ -10 $\Omega$ : ±100ppm 10Ω-10KΩ:  $\pm$ 50ppm

Insulation Resistance:  $400 \text{ M}\Omega$ Short time overload: 2x rated power for 5 sec., not to exceed 1.5x max. working voltage Dielectric Strength: 2000 VDC

TEST DATA				
Test	Conditions Of Test	Performance		
Load life	1000 hrs @ rated power ±1% ∆R			
Moisture resistance	MIL -STD-202, method 106 ±0.5% ΔR			
Short time overload	2x rated power for 5 sec., not to exceed ±0.3% ΔR 1.5x max. working voltage			
Solderability	MIL-STD-202, method 208			
Thermal shock	MIL-STD-202, method 170, cond. F	±0.2% ΔR		

STAND	ARD PART NUMBE	RS FOR TEH SERIES
Ohms	<b>P-type</b> 3-terminal	<b>M-type</b> 2-terminal
2 3 4 5 7.5	TEH70P2R00JE TEH70P3R00JE TEH70P4R00JE TEH70P5R00JE TEH70P7R50JE	TEH70M2R00JE TEH70M3R00JE TEH70M5R00JE TEH70M7R50JE
10 15 20 24 33	TEH70P10R0JE TEH70P15R0JE TEH70P20R0JE TEH70P24R0JE	TEH70M10R0JE TEH70M15R0JE TEH70M24R0JE TEH70M33R0JE
39 47 68 75 100	TEH70P47R0JE TEH70P68R0JE TEH70P100RJE	TEH70M39R0JE TEH70M47R0JE TEH70M68R0JE TEH70M75R0JE TEH70M100RJE
150 270 470 680 750	TEH70P150RJE TEH70P270RJE TEH70P470RJE TEH70P750RJE	TEH70M150RJE TEH70M270RJE TEH70M470RJE TEH70M680RJE TEH70M750RJE
1000 1500 2000 3000 5000	TEH70P1K00JE TEH70P1K50JE TEH70P2K00JE TEH70P5K00JE	TEH70M1K00JE TEH70M1K50JE TEH70M2K00JE TEH70M3K00JE TEH70M5K00JE
7500 10000	TEH70P7K50JE	TEH70M10K0JE

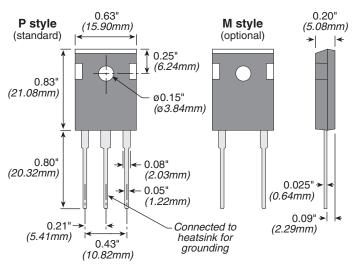
## THIS PRODUCT IS DESIGNED FOR USE WITH PROPER HEATSINKING.

Maximum base plate temperature of the resistor must be monitored and kept within specified limits to establish the power rating. Best technique is to attach a thermocouple to the side of the base plate of the resistor. Temperature of plastic housing or heat sink cannot be used to establish rating of the resistor.

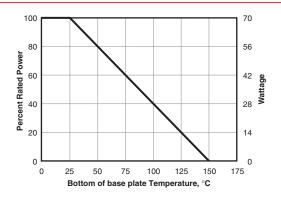


# TEH70 Series

## 70 Watt T0247 Package Thick Film Power



## DERATING





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