

TGHM Series

300 Watt SOT-227 Quick-Connect High-Power Resistors



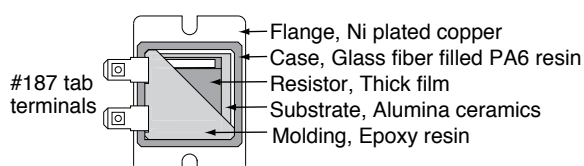
FEATURES

- Up to 300 watts of power dissipation with proper heatsinking at 25°C flange temperature
- #187 quick connect tab terminals provide easy connection to resistor
- Higher density packing, vibration-proof, TGHM is a high density design providing a low profile with 2000 volt withstanding voltage
- Vibration proof design passing IEC 60068-2-6
- Applications include harmonic filter, snubber resistors, surge protection, breeder resistor, dummy load, gate resistor, dumping resistor for automotive electronics, power supplies, pulse generators, high frequency amplifiers, theater audio equipment and power electronics

PERFORMANCE DATA

Rating Power	300 Watts	At flange temperature -55°C to +25°C
Thermal Resistance	0.23 °C/W	From resistor to flange
Resistance Range	0.1Ω to 1MΩ	Lowest 0.1Ω is available, 0.1Ω-1MΩ
Resistance values	E24+	Modified E24, additionally, 2.0 and 5.0.
TCR	±100ppm/K (A)	For -55°C to +175°C
Tolerance	±5% (J)	
Operation Temp.	-55°C to +175°C	At flange element surface
Max. Applied Voltage	$E = \sqrt{P \cdot R}$ or 1000V	
Withstanding Voltage	2000 VAC	60 seconds between terminals and flange. Leak current below 0.5mA
Load Life	$\Delta R \pm 1.0\%$	Continuous power 1000 hours.
Humidity	$\Delta R \pm 1.0\%$	60°C, 90 to 95%RH, DC0.1W, 1000 hours.
Temperature Cycle	$\Delta R \pm 1.0\%$	-55°C 30 min., +155°C 30min., 5 cycles.
Insulation Resistance	Over 1000MΩ	Between terminals and flange.
Vibration	$\Delta R \pm 0.5\%$	IEC60068-2-6, displacement 0.75mm or acceleration 100m/sec ² , 10Hz-54Hz sweep, 10 cycles X-Y-Z direction.
Flammability	UL94V-0	For resistor body
Weight	24 grams	
Torque, Mounting	1.6Nm max, 1.0Nm recommended	

CONSTRUCTION



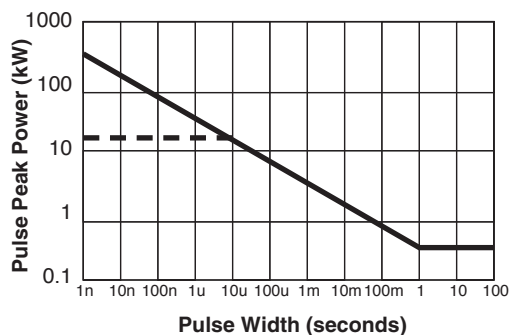
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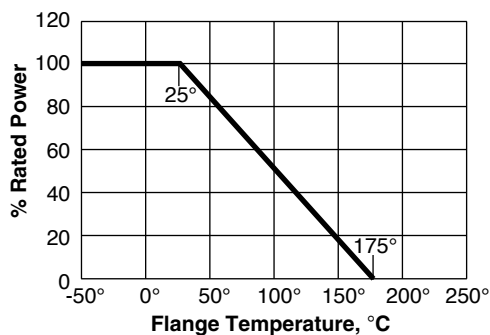
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CHARACTERISTICS

Derating



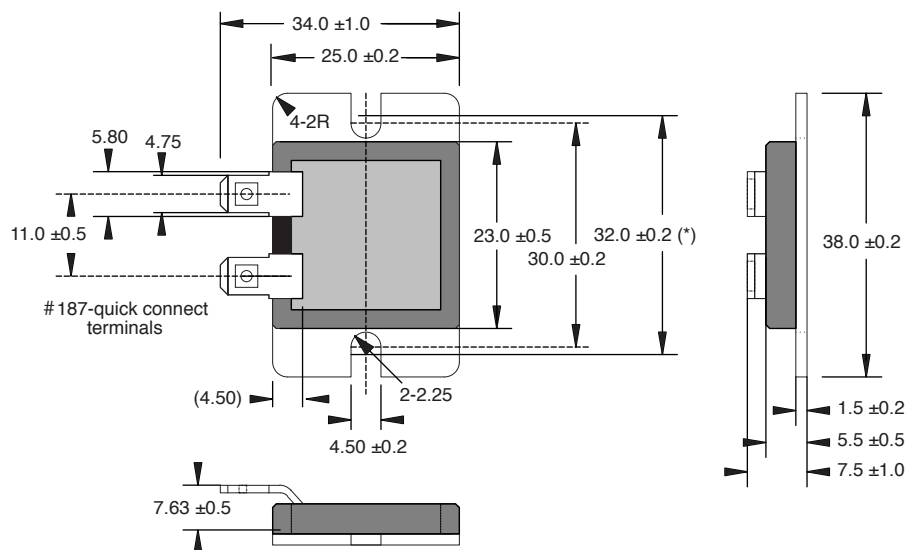
Pulse Durability



Limitation obtained by actual test with 0.01 duty continuous pulse repetition for TGHMV10R0JE, four times safety factor was considered. Please note this is not a specification, this is a typical data.

DIMENSIONS

(iin./mm)



ORDERING INFORMATION

Configuration			
V = config. 1 X = config. 2			
T G H M V R 1 0 0 J E			
TGHM Series	Wattage M = 300W	Resistance Value Example: R500 = 0.500Ω 1R00 = 1.0Ω 250R = 250Ω 1K00 = 1,000Ω 10K0 = 10,000Ω	Tolerance J = 5%

Standard Part Numbers

TGHMVR100JE	TGHMV50R0JE
TGHMVR200JE	TGHMV100RJE
TGHMVR500JE	TGHMV500RJE
TGHMV1R00JE	TGHMV1K00JE
TGHMV5R00JE	TGHMV2K50JE
TGHMV10R0JE	TGHMV5K00JE
TGHMV25R0JE	TGHMV10K0JE
TGHMV33R0JE	