TGH600 Series

600 Watt Thick Film S0T227 Package



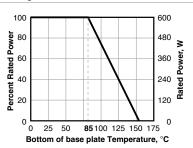
Due to the TGH600's non-inductive design, they are deally suited for high-frequency and pulse-load applications. The TGH600 series resistors are designed for direct mounting onto a heatsink and provides up to 600 watts of power dissipation. Popular applications include variable speed drives, power supplies, control devices, telecom, robotics, motor controls, and other switching designs.



CHARACTERISTICS

Ohmic range	0.25 to 1K	
Resistance tolerance	±10%; ±5% on request	
Temperature coefficient	±250ppm/°C (others on request)	
Maximum working voltage	500V DC (higher voltage on request)	
Power rating	600W at 85°C bottom case temperature	
Electric strength voltage	Dielectric strength up to 4,000VDC against ground	
Isolation voltage	between R1 and R2: 500V; 1,000V on request	
Partial discharge	2kVrms, <80pC	
Insulation resistance	10GΩ min. at 1kV	
Short time overload	1.25 x rated power at 85°C bottom case temp. for 10 sec, $\Delta R = 0.4\%$ max.	
Operating temperature	-55°C to +150°C	

Derating



Best results can be reached by using a thermal transfer compound with a heat conductivity of better than 1W/mK

PERFORMANCE DATA

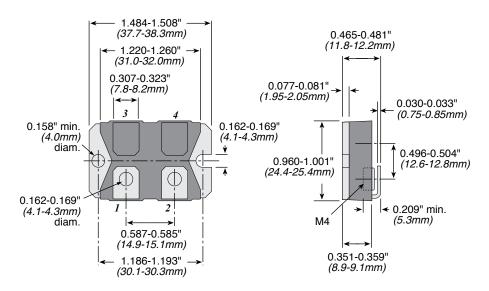
Test	Method	ΔR
Moisture Resistance	MIL-Std-202, Method 106	(0.5% + 0.001W) max
Thermal shock	Mil-Std-202, Method 107, Cond F	(0.3% + 0.01W) max
Terminal Strength	MIL-Std-202, Method 211, Cond A (pull test) 2.4N	(0.2% = 0.01W) max
Vibration, High Frequency	MIL-Std-202, Method 204, Cond D	(0.2% + 0.01W) max
Life	20 years (120,000 hours) Operating failure rate of 8.3 x 10-7 fail/hour.	
Requirements to be achieved under the following conditions: Tamb=25°C, THS=70°C, Papplied=Pn		

(continued)

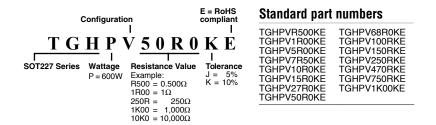
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DIMENSIONS



ORDERING INFORMATION



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.

