TGH Series

120 and 200 Watt SOT227Package Thick Film Power







Material

Heat Sink: Nickel-plated copper Contacts: Nickel-plated copper **Substrate:** Al203 (96%) Molding Compound: High-performance epoxy, compliant to UL94-V0

Terminal Nuts: American standard 303 stainless steel

Electrical

Resistance Range: 0.1Ω to $1M\Omega$

Tolerance: ±5%

Temperature coefficient: ±250ppm (at +105°C ref. to

Max. Work. Voltage: 500V (up to 1,000V on special request) Power Rating at 85°C: 120W (see

derating)

Partial Discharge: up to 2,000Vrms/80 pC

Voltage Proof: Dielectric Strength up to 4,000V DC against ground

Heat Resistance to Cooling Plate: Rth < 0.35 K/W Capacitance/Mass: 45pF Working Temp. Range: -55°C to +155°C

Max. Torque for Base Plate (static): 1.5 Nm

Max. Torque for Contacts (static): 1.3 Nm. M4 screws (not included)

Derating (thermal resistance): 2.86W/°K (0.35°K/W)

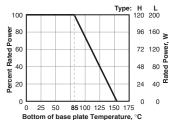
1.501" ±0.005 0.473" ±0.010 $(38.1 \text{mm} \pm 0.13)$ $(12.0mm \pm 0.26)$ 0.079" ±0.002 -1.235" Ref. (31.35mm) $(2.00mm \pm 0.05)$ 0.032" ±0.002 $(0.80mm \pm 0.05)$ 0.165" ±0.005 $(4.2mm \pm 0.13)$ 0.500" ±0.010 0.980" ±0.021 $(12.7mm \pm 0.26)$ $(24.9 mm \pm 0.5)$ 0.209" M4 (5.3mm) 0.591" ±0.005 max. $(15.0mm \pm 0.13)$ 1.190" ±0.010 → $(30.2mm \pm 0.26)$

Due to their non-inductive design, these resistors are ideally suited for high-frequency and pulse-load applications. Available in 120- or 200-watt sizes, this resistor is designed for direct mounting onto a heatsink. Popular applications include variable speed drives, power supplies, control devices, telecom, robotics, motor controls, and other switching designs.

STANDARD PART NUMBERS 120 Watt TGHH 200 Watt TGHL 0.1 TGHHVR100JE TGHLVR100JE 0.5 TGHLVR500JE TGHLV1R00JE TGHHV1R00JE TGHHV5R00JE TGHHV10R0JE TGHLV10R0JE 10 TGHLV25R0JE 25 TGHHV33R0JE TGHHV50R0JE 33 TGHLV33R0JE 50 TGHLV100RJE TGHHV150RJE 150 TGHLV150RJE 500 TGHHV500RJE TGHLV500RJE 680 TGHHV680B.IF TGHI V680B.IF TGHHV1K00JE TGHLV1K00JE TGHHV5K00JE TGHLV5K00JE 10K TGHHV10K0JE TGHLV10K0JE



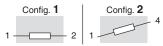
DERATING



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

CONFIGURATIONS

(per package)



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.

Subscribe to our **New Product Bulletin at** ohmite.com