

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.



TGH Series

120 and 200 Watt SOT227Package
Thick Film Power



SPECIFICATIONS

Material

Heat Sink: Nickel-plated copper

Contacts: Nickel-plated copper

Substrate: Al2O3 (96%)

Molding Compound: High-performance epoxy, compliant to UL94-V0

Terminal Nuts: American standard 303 stainless steel

Electrical

Resistance Range: 0.1Ω to 1MΩ

Tolerance: ±5%

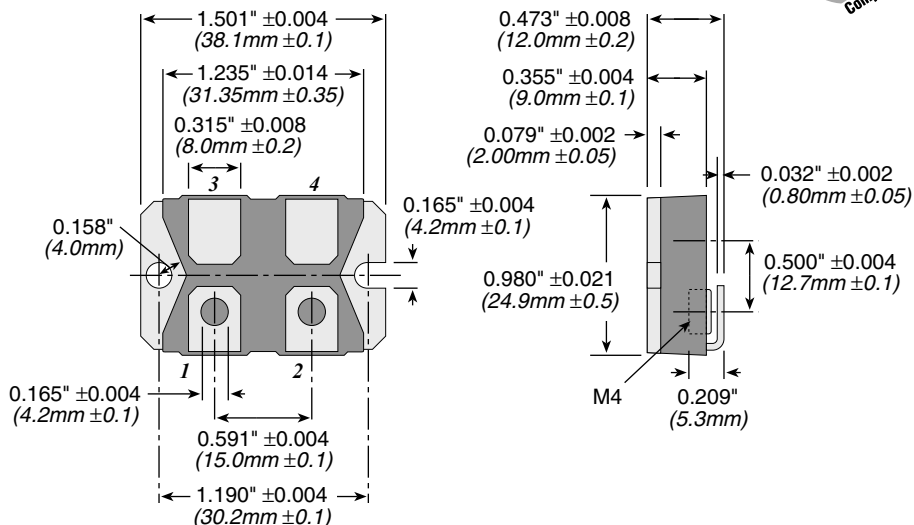
Temperature coefficient: ±250ppm (at +105°C ref. to +25°C)

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: $R_{th} < 0.35$ K/W

Capacitance/Mass: 45pF

Working Temp. Range: -55°C to +155°C

Max. Torque for Base Plate

(static): 1.5 Nm

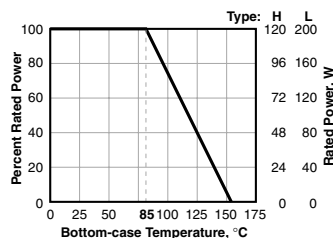
Max. Torque for Contacts

(static): 1.3 Nm. M4 screws (not included)

Derating (thermal resistance):

2.86W/°K (0.35°K/W)

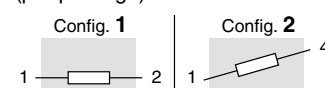
DERATING



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

CONFIGURATIONS

(per package)



STANDARD PART NUMBERS

Ohms	120 Watt TGH	200 Watt TGH
0.1	TGHHVR100JE	TGHLVR100JE
0.5	TGHHVR500JE	TGHLVR500JE
1	TGHHV1R00JE	TGHLV1R00JE
5	TGHHV5R00JE	TGHLV5R00JE
10	TGHHV10R0JE	TGHLV10R0JE
25	TGHHV25R0JE	TGHLV25R0JE
33	TGHHV33R0JE	TGHLV33R0JE
50	TGHHV50R0JE	TGHLV50R0JE
100	TGHHV100RJE	TGHLV100RJE
150	TGHHV150RJE	TGHLV150RJE
500	TGHHV500RJE	TGHLV500RJE
680	TGHHV680RJE	TGHLV680RJE
1K	TGHHV1K00JE	TGHLV1K00JE
5K	TGHHV5K00JE	TGHLV5K00JE
10K	TGHHV10K0JE	TGHLV10K0JE

ORDERING INFORMATION

Configuration
V = config. 1
X = config. 2

E = RoHS compliant

T G H H V 1 R 0 0 J E

SOT 227 Series Wattage Resistance Value Tolerance

H = 120W L = 200W Example: J = 5%

R500 = 0.500Ω
1R00 = 1Ω
250R = 250Ω
1K00 = 1,000Ω
10K0 = 10,000Ω

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