

TGHD Series

Chassis Mounting Non-inductive High Power Resistors



FEATURES

- #187 Quick connect tabs or fly wire leads
- Flat type, 100W high power resistor
- Air-cooled heat sink or water-cooling required.
- Higher density packing, vibration-proof, insulation withstand voltage and perfect heat dissipation possible.
- TG HDX contains wire leads and the TGHDX contains QC terminals.



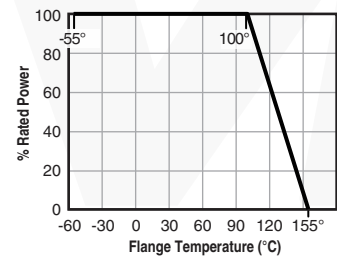
APPLICATIONS

- Harmonic filter
- Gate resistor
- Snubber resistors
- Dumping resistor for automotive electronics
- Surge protection
- Power supplies
- Breeder resistor
- Dummy load
- High frequency amplifiers

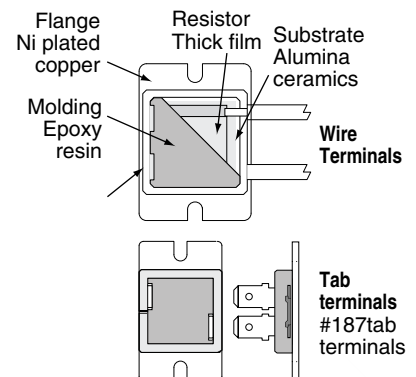
CHARACTERISTICS

Rated Power	100W at flange temperature -55 to +100°C (wire leads) or -55 to +25°C (quick connect)
Heat Resistance	0.5°C/W from resistor to flange
Resistance Range	0.1Ω to 51kΩ; lowest 0.1 ohm is available
Nominal Resistance	E24+ Modified E24, additionally, 2.0 and 5.0
TCR	±100 ppm/K (A) For -55 to +155°C
Tolerance	±5% (J)
Operation Temp.	-55 to +155°C at flange element surface
Max. Applied Voltage	$E = \sqrt{P \cdot R}$ or 1000V
Withstanding Voltage	5000 VAC 60 seconds, leak current below 0.5mA
Torque	Mounting 1.6Nm max, 1.0Nm recommend
Weight	23g
Insulation Resistance	Over 1000MΩ between terminals and flange

Derating



Construction



Test	Procedure	Requirement
Load Life	Continuous power 1000 hours	$\Delta R \pm 1.0\%$
Humidity	60°C, 90 to 95%RH, DC0.1W, 1000 hours	$\Delta R \pm 1.0\%$
Temperature Cycle	-55°C, 30 min., +155°C 30min., 5 cycles	$\Delta R \pm 1.0\%$
Vibration	IEC60068-2-6, displacement 0.75mm or acceleration 100m/sec ² , 10Hz-54Hz sweep, 10 cycles X-Y-Z direction	$\Delta R \pm 0.5\%$
Flammability	For resistor body	UL94V-0

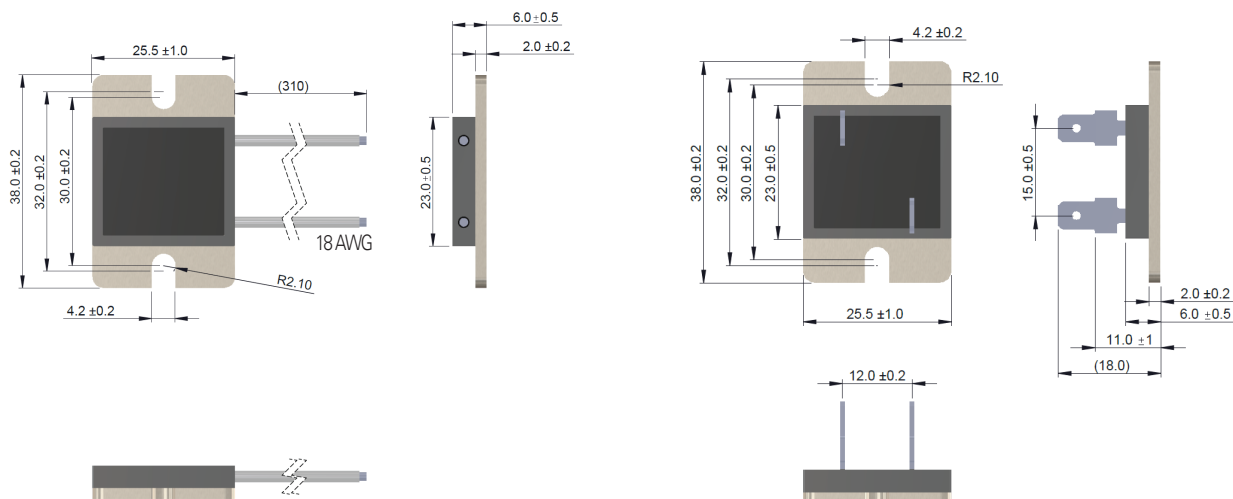
(continued)

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High Power Resistors

DIMENSIONS

mm



ORDERING INFORMATION

T G H D V 1 0 R 0 J E

Series Termination Ohm Value Tolerance

V = Quick Connect
X = Wired

RoHS Compliant
J = 5% std.

Standard part numbers

Quick Connect	Wired Termination
TGHDVR100JE	TGHDXR100JE
TGHDVR500JE	TGHDXR500JE
TGHDV1R00JE	TGHDX1R00JE
TGHDV5R00JE	TGHDX5R00JE
TGHDV10R0JE	TGHDX10R0JE
TGHDV27R0JE	TGHDX27R0JE
TGHDV47R0JE	TGHDX47R0JE
TGHDV100RJE	TGHDX100RJE
TGHDV270RJE	TGHDX270RJE
TGHDV470RJE	TGHDX470RJE
TGHDV1K00JE	TGHDX1K00JE
TGHDV5K00JE	TGHDX5K00JE

Available values

Resistance value is available following modified E24. Contact factory for other values.

1.0	1.8	3.0	4.7	7.5
1.1	2.0	3.3	5.0	8.0
1.2	2.2	3.6	5.1	8.2
1.3	2.4	3.9	5.6	9.1
1.5	2.5	4.0	6.2	
1.6	2.7	4.3	6.8	