

# 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.
- TGHDX contains wire leads and the TGHDV contains QC terminals.



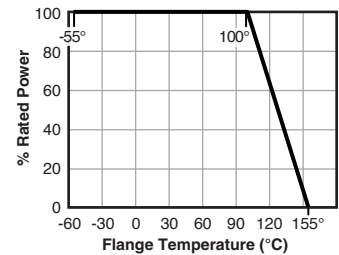
### APPLICATIONS

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

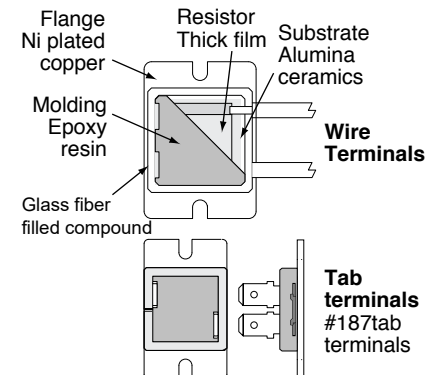
## CHARACTERISTICS

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

### Derating



### Construction



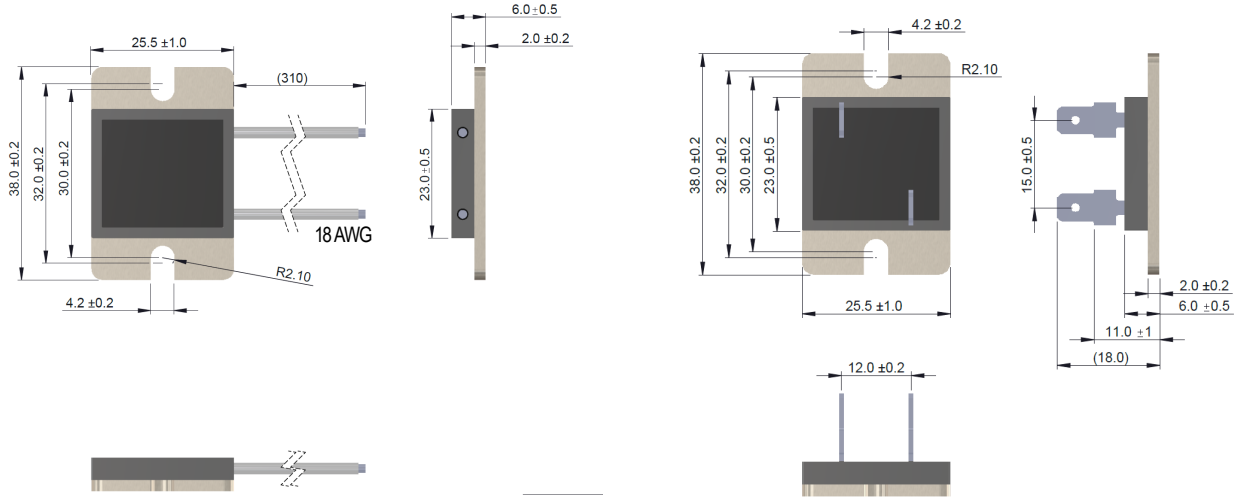
Test	Procedure	Requirement
<b>Load Life</b>	Continuous power 1000 hours	$\Delta R \pm 1.0\%$
<b>Humidity</b>	60°C, 90 to 95%RH, DC0.1W, 1000 hours	$\Delta R \pm 1.0\%$
<b>Temperature Cycle</b>	-55°C, 30 min., +155°C 30min., 5 cycles	$\Delta R \pm 1.0\%$
<b>Vibration</b>	IEC60068-2-6, displacement 0.75mm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

(continued)

# TGHD Series

## Chassis Mounting Non-inductive High Power Resistors

### DIMENSIONS



### ORDERING INFORMATION

RoHS Compliant

**T G H D V 1 0 R 0 J E**

Series      Termination      Ohm Value      Tolerance

V = Quick Connect  
X = Wired

J = 5% std.

#### Standard part numbers

Quick Connect	Wired Termination
TGHDV100JE	TGHDXR100JE
TGHDV500JE	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	