

The HiTemp ET Series of Thermoelectric Modules (TEMs) are designed to operate in high temperature environments.

This product line is available in multiple configurations and is ideal for applications that operate in temperatures above 80°C. Assembled with Bismuth Telluride semiconductor material, thermally conductive Aluminum Oxide ceramics and high temp solder construction, the ET Series is designed for higher current and larger heat-pumping applications.

### FEATURES

- High-temperature differential
- Precise temperature control
- Reliable solid-state operation
- Environmentally-friendly
- DC operation
- RoHS-compliant

### APPLICATIONS

- CCD cameras
- Electron Microscope
- Calibration equipment
- Photonics laser systems
- Gas analyzers
- Infrared (IR) sensors
- Guidance systems

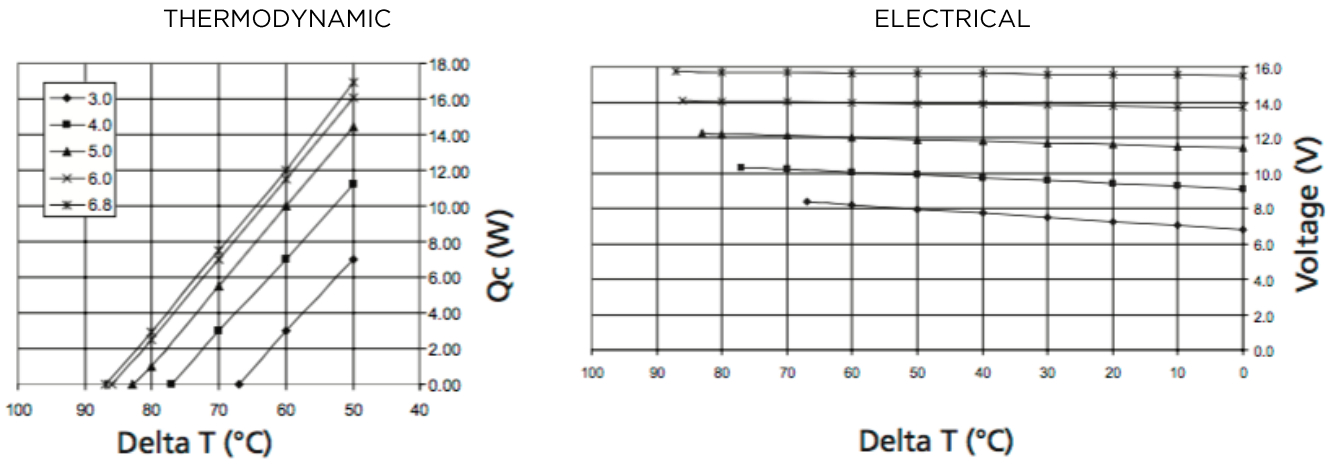
TECHNICAL SPECIFICATIONS	
Hot Side Temperature (°C)	25
Q <sub>max</sub> (W)	39.9
Delta T <sub>max</sub> (°C)	87
I <sub>max</sub> (Amps)	6.8
V <sub>max</sub> (Volts)	15.8

SUFFIX	THICKNESS (PRIOR TO THINNING)	FLATNESS & PARALLELISM	HOT FACE	COLD FACE	LEAD LENGTH
00	0.326"±0.008"	0.001"/0.004"	Metallized	Metallized	7.87"
11	0.319"±0.008"	0.001"/0.002"	Lapped	Lapped	7.87"
22	0.326"±0.008"	0.001"/0.004"	Pre-tinned	Pre-tinned	7.87"

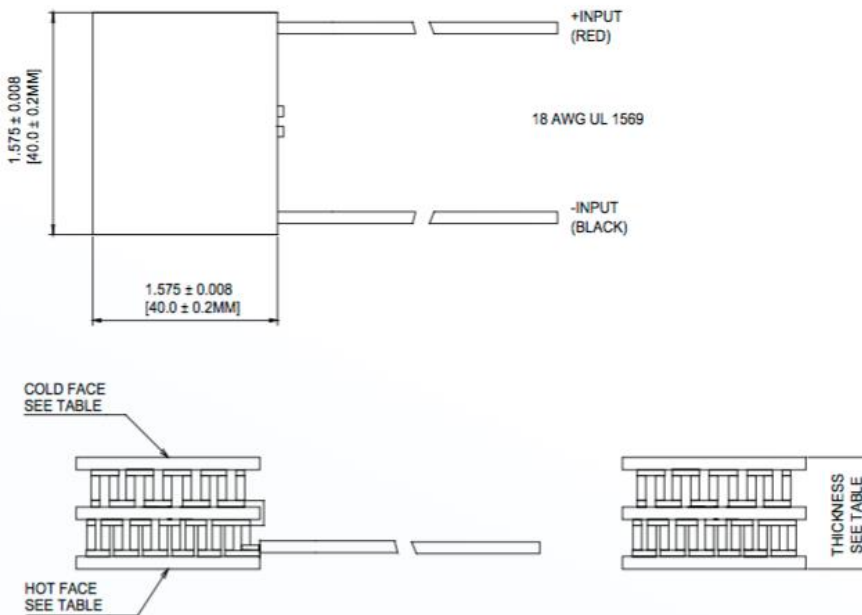
### SEALING OPTIONS

SUFFIX	SEALANT	COLOR	TEMPERATURE RANGE	DESCRIPTION
RT	RTV	White	-60 to +204 °C	Non-corrosive, silicone adhesive
EP	Epoxy	Black	-55 to +150 °C	Low density syntactic foam epoxy encapsulant

## PERFORMANCE CURVES AT $T_h = 25^\circ\text{C}$



## MECHANICAL DRAWING



### NOTES:

- Maximum Operating Temperature: 80°C
- Do not exceed  $I_{max}$  or  $V_{max}$  when operating module
- Reference assembly guidelines for recommended installation
- Solder tinning also available on metallized ceramics

Ceramic Material: **96% Alumina Ceramics**  
 Solder Construction: 138°C, Bismuth Tin (BiSn)



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