



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-temperature solder construction, the ET Series is designed for higher current and larger heat-pumping applications.

## **FEATURES**

- High-temperature operation
- Reliable solid state
- No sound or vibration
- Environmentally-friendly
- RoHS-compliant

# **APPLICATIONS**

- Automotive cooling
- Telecom cooling
- Outdoor environments
- Medical heating/cooling

TECHNICAL SPECIFICATIONS					
Hot Side Temperature (°C)	85	110			
Qmax (W)	10.6	10.8			
Delta Tmax (°C)	87	94			
Imax (Amps)	2.0	2.0			
Vmax (Volts)	9.6	10.4			
Module Resistance (Ohms)	4.46	4.94			

SUFFIX	THICKNESS (PRIOR TO THINNING)	FLATNESS & PARALLELISM	HOT FACE	COLD FACE	LEAD LENGTH
11	0.096" ± 0.002"	0.002"/0.002"	Lapped	Lapped	2.25″

### SEALING OPTIONS

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



# ET20,65,F2A,1312 Thermoelectric Modules

#### PERFORMANCE CURVES AT Th = 85° C



#### MECHANICAL DRAWING



#### NOTES:

- Maximum Operating Temperature: 150°C
- Do not exceed Imax or Vmax when operating module
- Reference assembly guidelines for recommended installation

COLD SIDE OPTION

HOT SIDE OPTION

Ceramic Material: Alumina(Al2O3) Solder Construction: 232°C SbSn

# **RoHS**

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THICKNESS

(SEE OPTIONS)

5

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