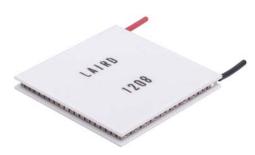


# **UltraTEC**<sup>TM</sup> Series UT6,19,F1,4040

## Thermoelectric Module



The UltraTEC<sup>™</sup> Series is a high heat pumping density thermoelectric module (TEM). The module is assembled with a large number of semiconductor couples to achieve a higher heat pumping capacity than standard single stage TEMs.

This product line is available in multiple configurations and is ideal for applications that require higher cooling capacities with limited surface area. Assembled with Bismuth Telluride semiconductor material and thermally conductive Aluminum Oxide ceramics, the UltraTEC<sup>TM</sup> Series is designed for higher current and larger heat-pumping applications.

### **FEATURES AND BENEFITS**

- High heat pump density
- Precise temperature control
- Reliable solid state operation
- No sound or vibration
- DC operation
- RoHS compliant

### **APPLICATIONS**

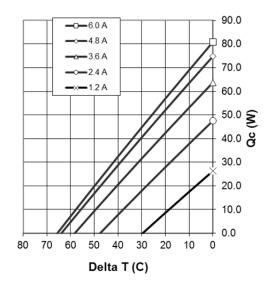
- Analytical instrumentation
- Clinical diagnostics
- Photonics laser systems
- Electronic enclosure cooling
- Food and beverage cooling
- Chillers (liquid cooling)

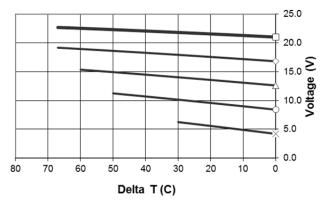
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# **UltraTEC**<sup>TM</sup> Series **UT6,19,F1,4040**

## Thermoelectric Module





## **SPECIFICATIONS**

TECHNICAL		
Hot Side Temperature	25°C	50°C
Qmax	80.9 W	88.8 W
Delta Tmax	67°C	75°C
Imax (A)	6.0	6.0
Vmax (V)	22.6	25.6
Module Resistance (ohms)	3.49	3.94

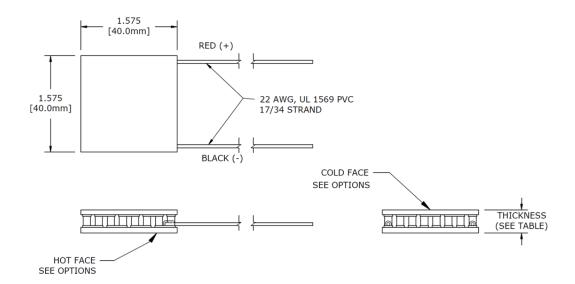
Suffix	Thickness	Flatness & Parallelism	Hot Face	Cold Face	Lead Length
TA	0.150" ± 0.001"	0.001" / 0.001"	Lapped	Lapped	6.0"
ТВ	0.150" ± 0.0005"	0.0005" / 0.0005"	Lapped	Lapped	6.0"



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Thermoelectric Module

### **MECHANICAL DRAWING**



### **OPERATING TIPS**

- Max operating temperature: 80°C
- Do not exceed Imax or Vmax when operating module
- Reference assembly guidelines for installation