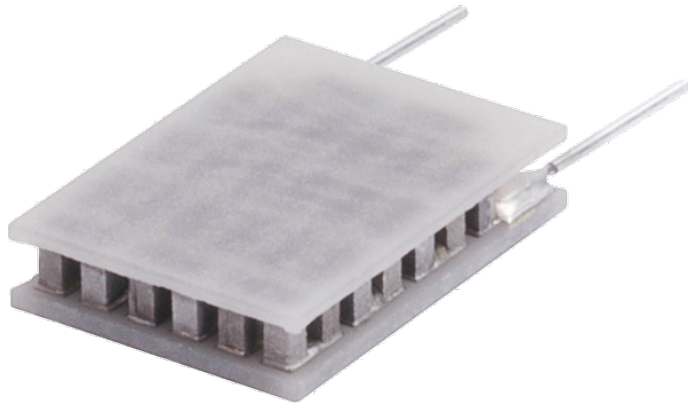


HiTemp ET Series Thermoelectric Cooler

**Note: This product is not recommended for new designs.**  
 This product series has been replaced with the HiTemp ETX Series.  
 The recommended replacement is:  
 Description: OTX19-23-F1N-0608-GG-W2.25

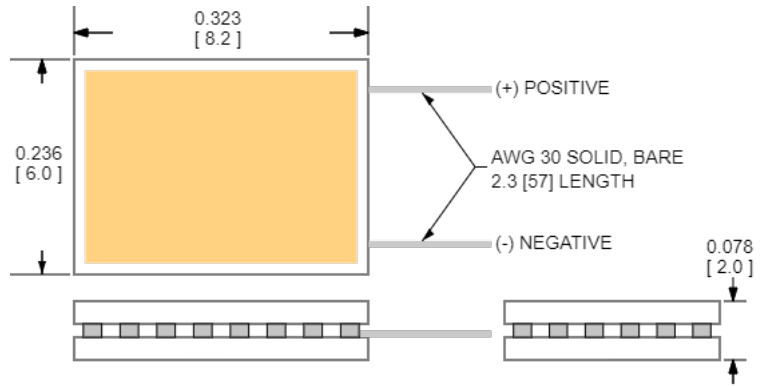


Features

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

Applications

- Peltier Cooling for Refrigerated Centrifuges
- Peltier Cooling for Machine Vision
- Thermoelectric Cooling for CMOS Sensors
- Cooling Solutions for Autonomous Systems
- Peltier Cooling for Digital
- Light Processors

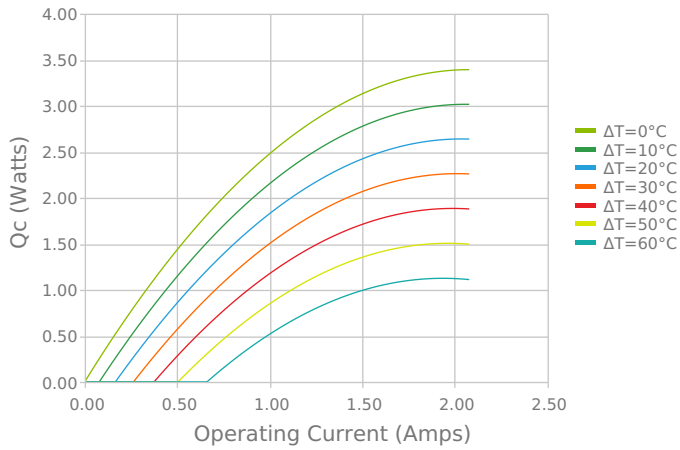


CERAMIC MATERIAL: AlN  
 SOLDER CONSTRUCTION: 232°C, SbSn

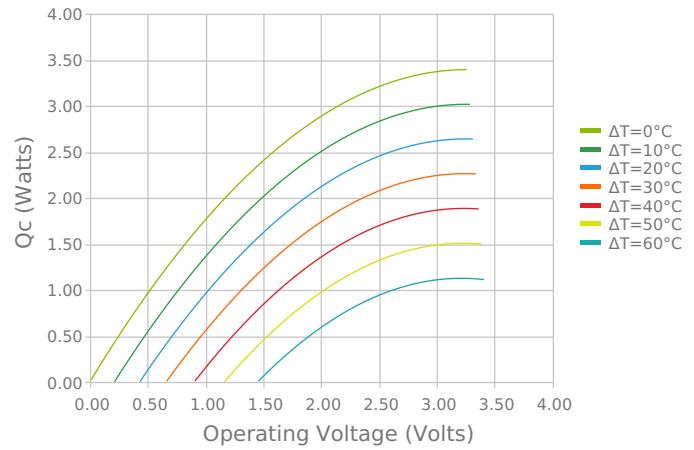
INCHES [MM]

ELECTRICAL AND THERMAL PERFORMANCE

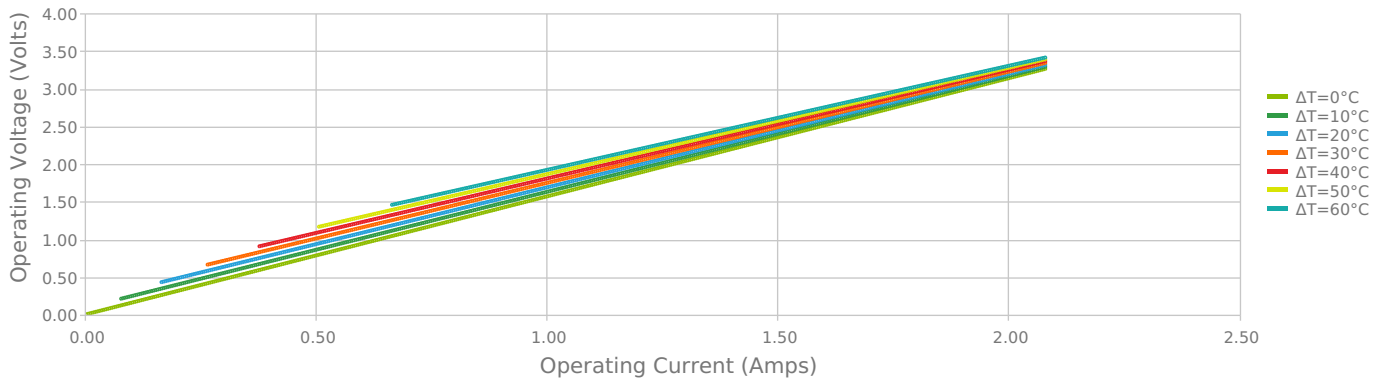
Heat Pumped at Cold Side  
 $T_{hot} = 85\text{ }^{\circ}\text{C}$



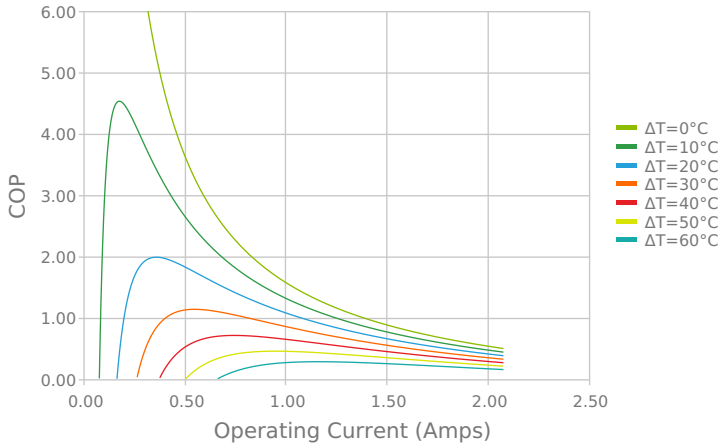
Heat Pumped at Cold Side  
 $T_{hot} = 85\text{ }^{\circ}\text{C}$



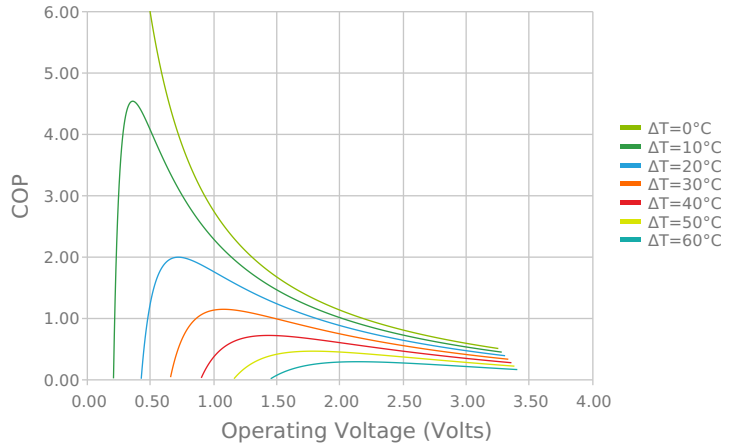
Current vs Voltage (I vs V)  
 $T_{hot} = 85\text{ }^{\circ}\text{C}$



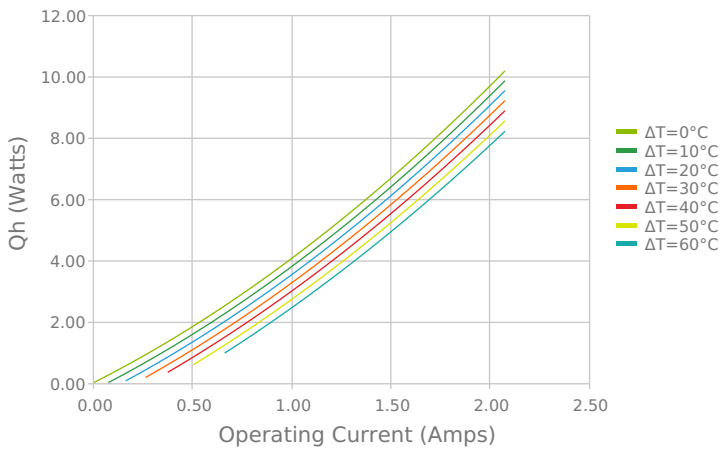
Coefficient of Performance (COP = Qc/Pin)  
Thot = 85 °C



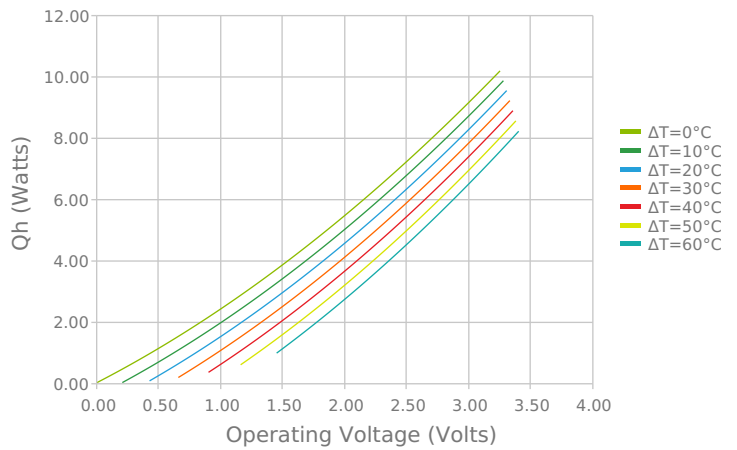
Coefficient of Performance (COP = Qc/Pin)  
Thot = 85 °C



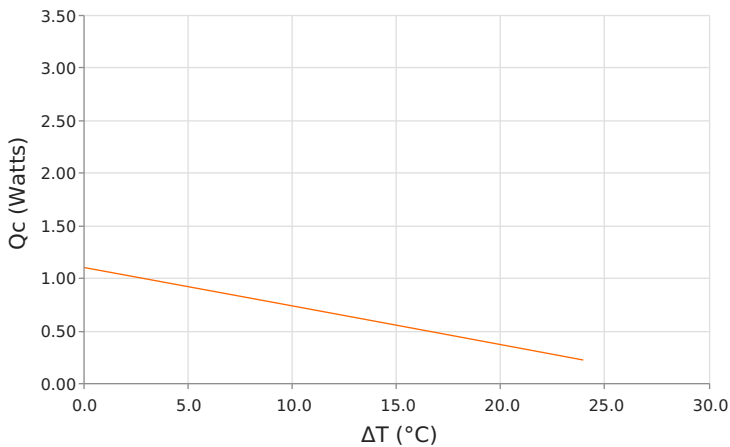
Total Heat Dissipated at Hot Side (Qh=Qc+Pin)  
Thot = 85 °C



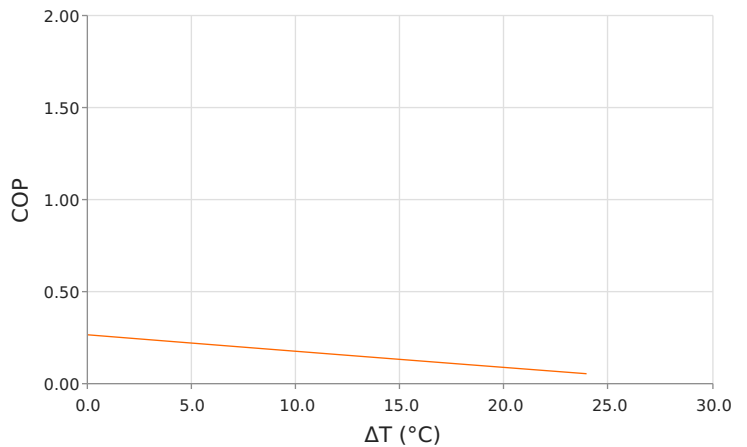
Total Heat Dissipated at Hot Side (Qh=Qc+Pin)  
Thot = 85 °C



Heat Pumped at Cold Side (Qc)  
Thot = 85 °C | Current = 1.6 Amps



Coefficient of Performance (COP = Qc/Pin)  
Thot = 85 °C | Current = 1.6 Amps



## SPECIFICATIONS\*

Hot Side Temperature	50.0 °C	85.0 °C	110.0 °C
<b>Qcmax (<math>\Delta T = 0</math>)</b>	3.1 Watts	3.4 Watts	3.5 Watts
<b><math>\Delta T_{max}</math> (<math>Q_c = 0</math>)</b>	77.9°C	89.3°C	96.2°C
<b>I<sub>max</sub> (I @ <math>\Delta T_{max}</math>)</b>	1.9 Amps	1.8 Amps	1.8 Amps
<b>V<sub>max</sub> (V @ <math>\Delta T_{max}</math>)</b>	2.8 Volts	3.2 Volts	3.5 Volts
<b>Module Resistance</b>	1.35 Ohms	1.57 Ohms	1.72 Ohms
<b>Max Operating Temperature</b>	150 °C		
<b>Weight</b>	1.0 gram(s)		

\* Specifications reflect thermoelectric coefficients updated March 2020

## FINISHING OPTIONS

Suffix	Thickness	Flatness / Parallelism	Hot Face	Cold Face	Lead Length
GG	1.981 ±0.127 mm 0.078 ± 0.0050 in	N/A / N/A	Au Plated	Au Plated	50.8 mm 2.00 in

## SEALING OPTIONS

Suffix	Sealant	Color	Temp Range	Description
	None			No sealing specified

## NOTES

1. Max operating temperature: 150°C
2. Do not exceed I<sub>max</sub> or V<sub>max</sub> when operating module
3. Reference assembly guidelines for recommended installation

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Date: 01/08/2022