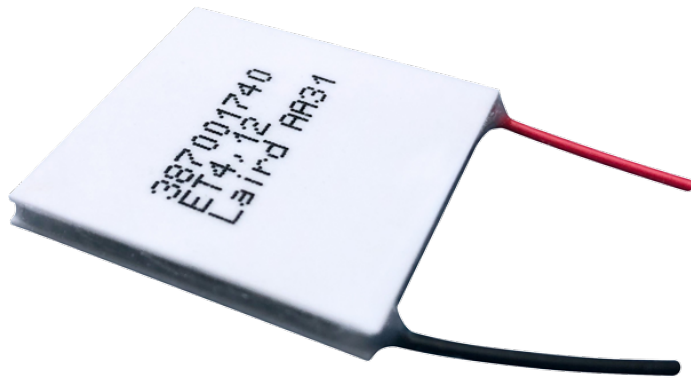


HiTemp ET Series Thermoelectric Cooler

**Note: This product is not recommended for new designs.**  
 This product series has been replaced with the HiTemp ETX Series.  
 The recommended replacement is:  
 MFG Part Number: 387004967  
 Description: ETX4-12-F1-3030-TA-RT-W6

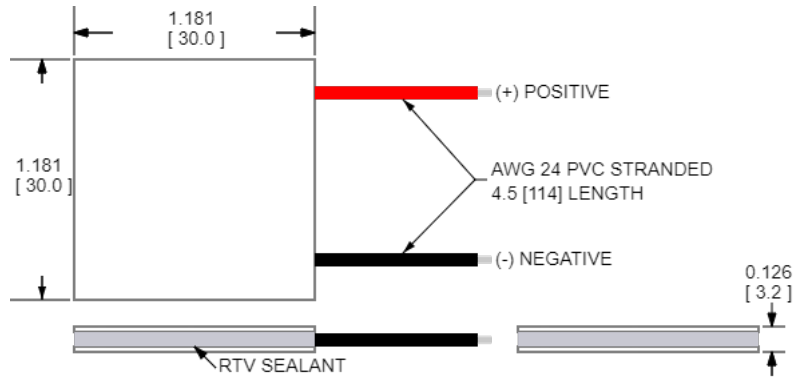


Features

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

Applications

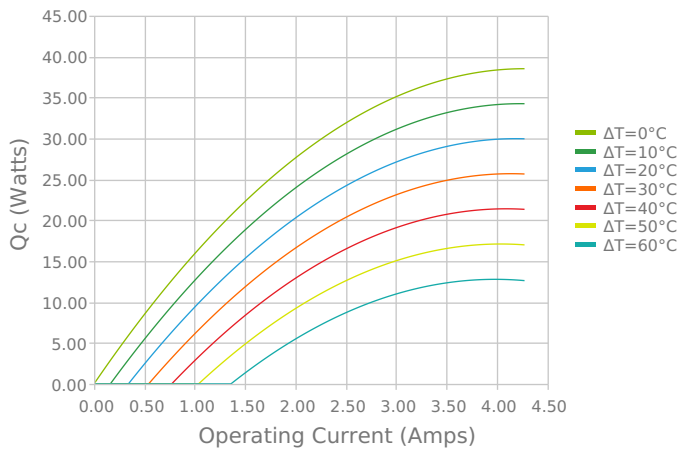
- Peltier Cooling for Refrigerated Centrifuges
- Peltier Cooling for Machine Vision
- Thermoelectric Cooling for CMOS Sensors
- Cooling Solutions for Autonomous Systems
- Peltier Cooling for Digital
- Light Processors



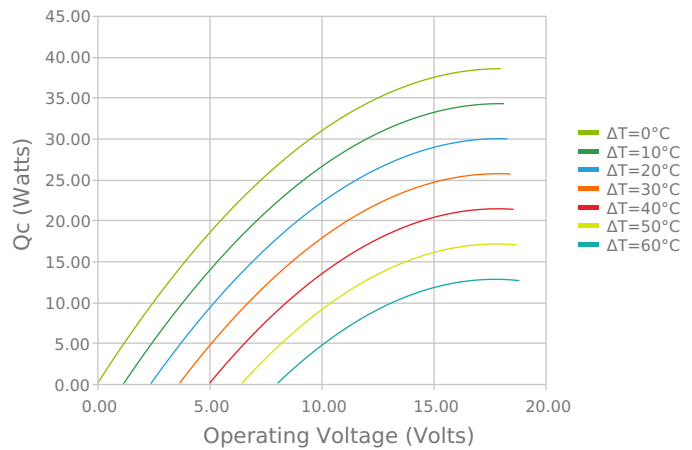
CERAMIC MATERIAL: Al<sub>2</sub>O<sub>3</sub>  
 SOLDER CONSTRUCTION: 232°C, SbSn  
 INCHES [MM]  
 Note: Allow 0.020 in [0.5 mm] around perimeter of the thermoelectric cooler and lead wire attachment to accommodate sealant

ELECTRICAL AND THERMAL PERFORMANCE

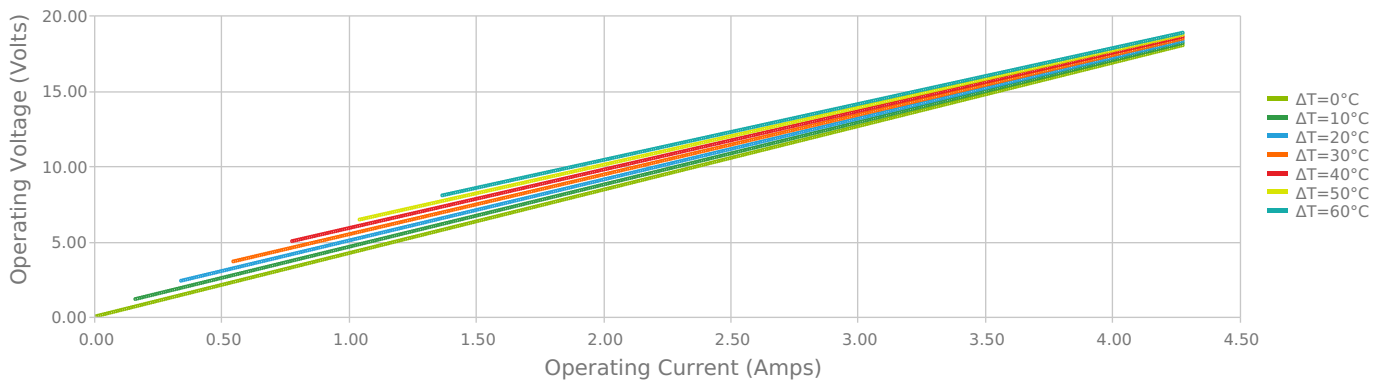
Heat Pumped at Cold Side  
 Thot = 85 °C



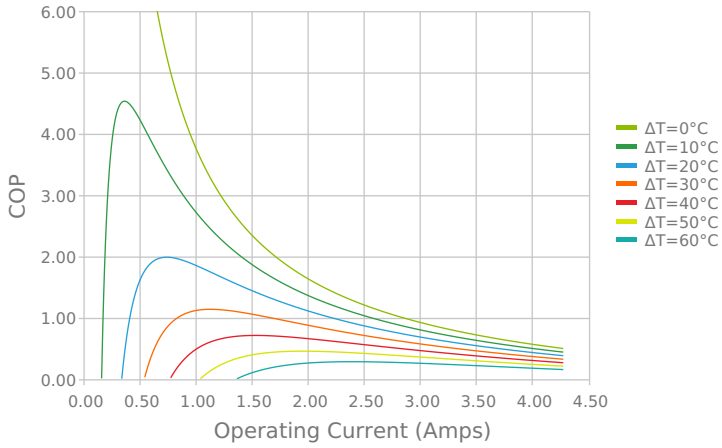
Heat Pumped at Cold Side  
 Thot = 85 °C



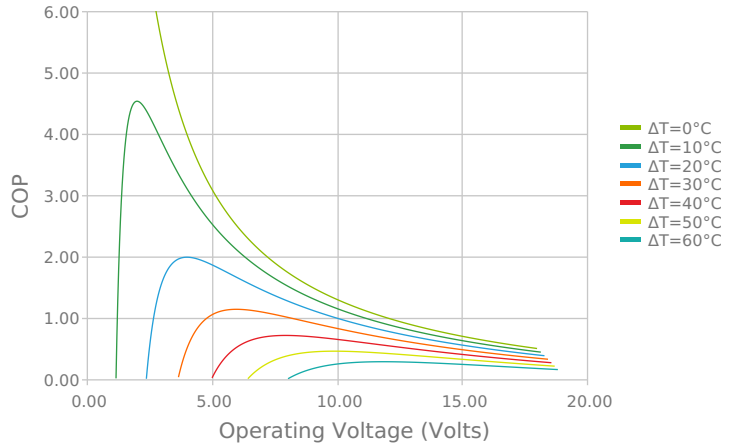
Current vs Voltage (I vs V)  
 Thot = 85 °C



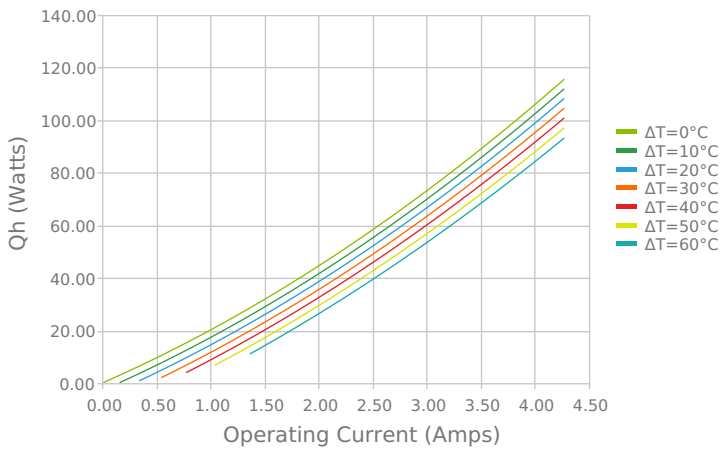
Coefficient of Performance (COP = Qc/Pin)  
Thot = 85 °C



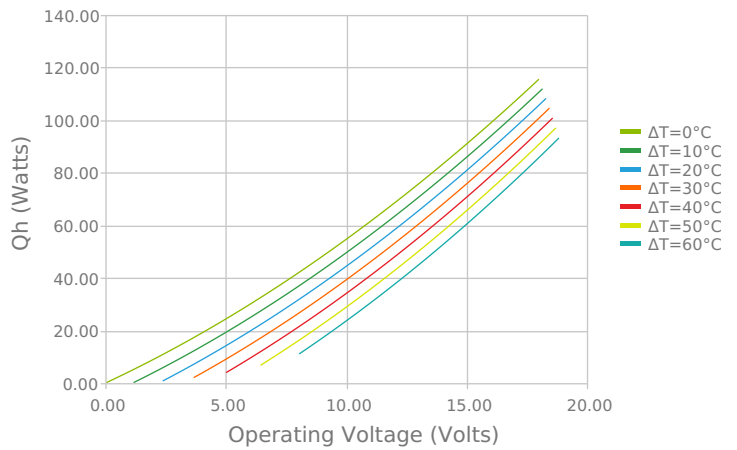
Coefficient of Performance (COP = Qc/Pin)  
Thot = 85 °C



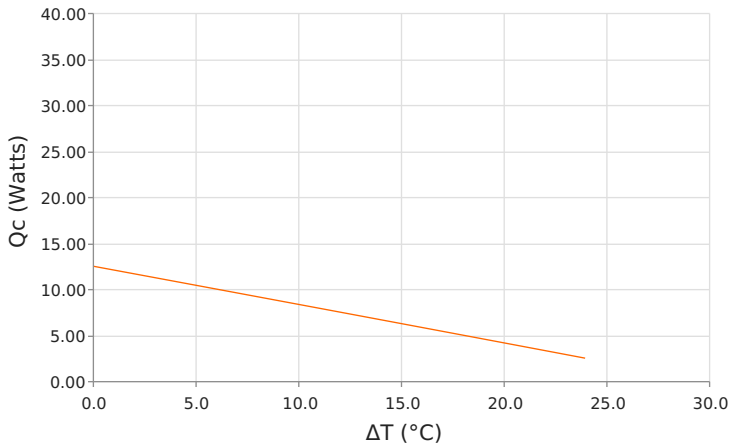
Total Heat Dissipated at Hot Side (Qh=Qc+Pin)  
Thot = 85 °C



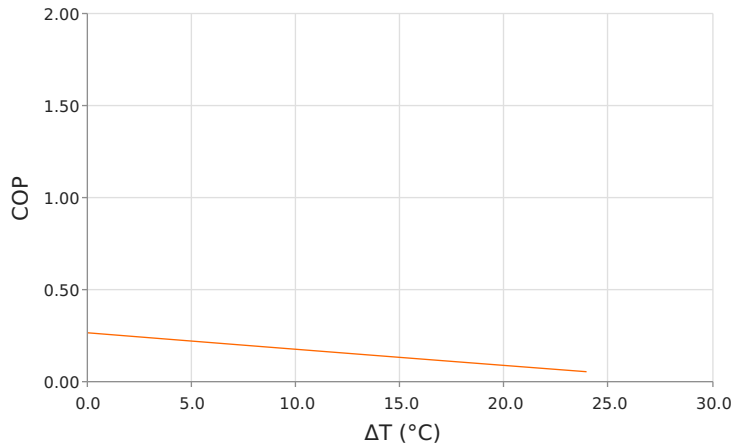
Total Heat Dissipated at Hot Side (Qh=Qc+Pin)  
Thot = 85 °C



Heat Pumped at Cold Side (Qc)  
Thot = 85 °C | Current = 3.2 Amps



Coefficient of Performance (COP = Qc/Pin)  
Thot = 85 °C | Current = 3.2 Amps



## SPECIFICATIONS\*

Hot Side Temperature	50.0 °C	85.0 °C	110.0 °C
<b>Qcmax (<math>\Delta T = 0</math>)</b>	35.1 Watts	38.5 Watts	40.2 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>	3.9 Amps	3.8 Amps	3.7 Amps
<b>V<sub>max</sub> (V @ <math>\Delta T_{max}</math>)</b>	15.3 Volts	17.5 Volts	19.1 Volts
<b>Module Resistance</b>	3.62 Ohms	4.21 Ohms	4.61 Ohms
<b>Max Operating Temperature</b>	150 °C		
<b>Weight</b>	9.0 gram(s)		

\* Specifications reflect thermoelectric coefficients updated March 2020

## FINISHING OPTIONS

Suffix	Thickness	Flatness / Parallelism	Hot Face	Cold Face	Lead Length
11	3.200 ±0.051 mm 0.126 ± 0.0020 in	0.051 mm / 0.051 mm 0.002 in / 0.002 in	Lapped	Lapped	50.8 mm 2.00 in

## SEALING OPTIONS

Suffix	Sealant	Color	Temp Range	Description
RT	RTV	Translucent or White	-60 to 204°C	Non-corrosive, silicone adhesive

## 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