HiTemp ETX Series ETX3-3-F2-1518-TA-W6
MFG Part Number: 387004923

HiTemp ETX Series Thermoelectric Cooler

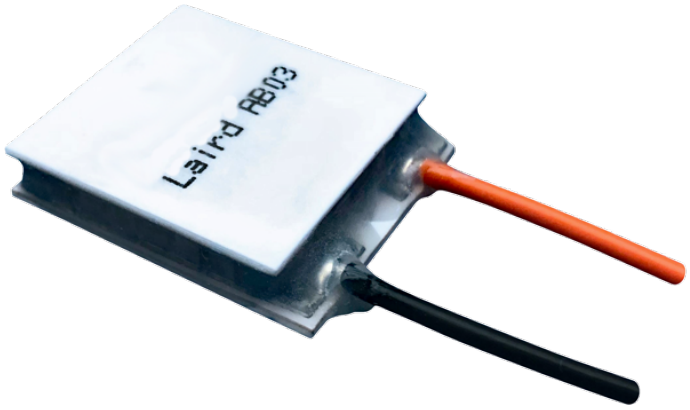
The ETX3-3-F2-1518-TA-W6 high temperature, high-performance Thermoelectric Cooler uses Laird's enhanced Thermoelectric Module construction preventing performance degrading copper diffusion, which is common in standard grade Thermoelectric Coolers operating in high temperature environments exceeding 80 °C. It has a maximum Qc of 7.7 Watts when ΔT = 0 and a maximum ΔT of 83.2 °C at Qc = 0.

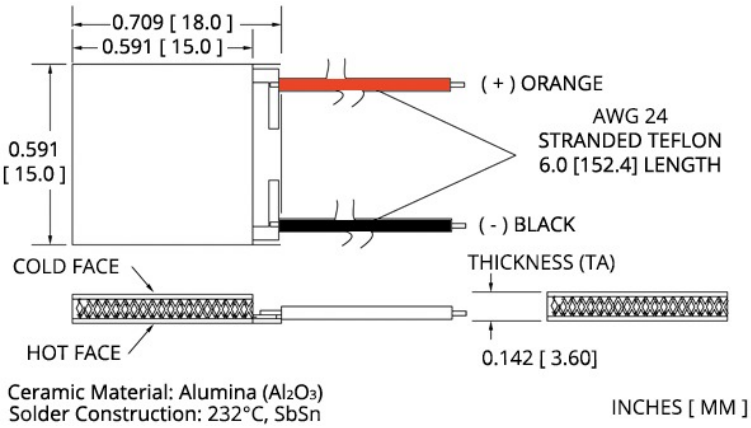
Features

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

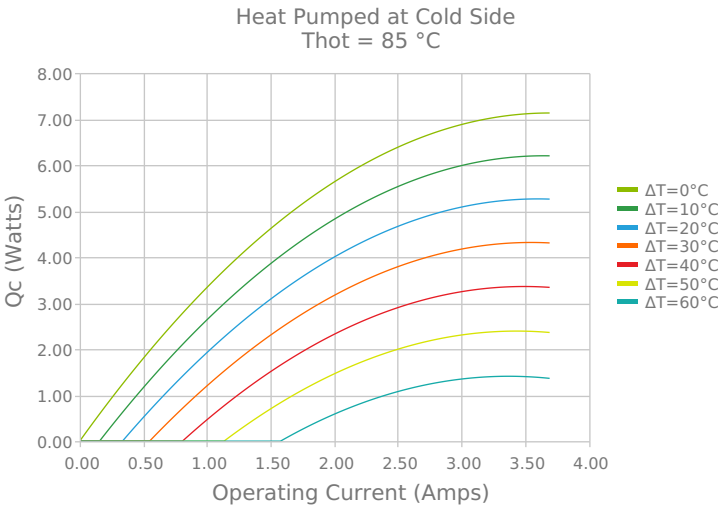
Applications

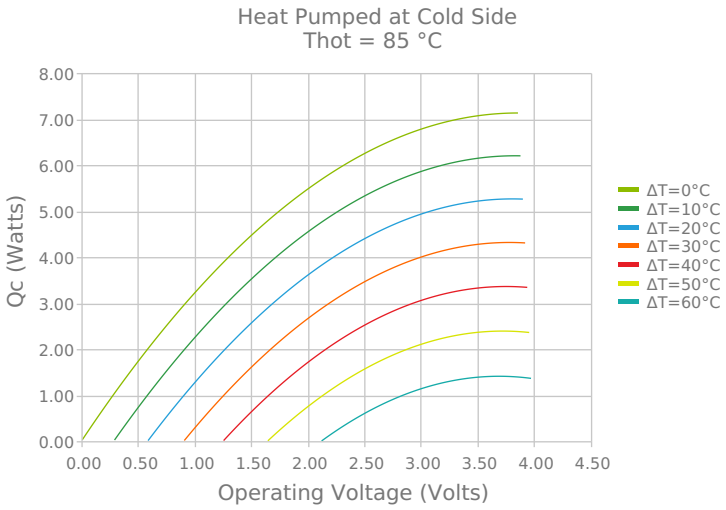
- Peltier Cooling for Refrigerated Centrifuges
- Peltier Cooling for Machine Vision
- Thermoelectric Cooling for CMOS Sensors
- Cooling Solutions for Autonomous Systems
- Peltier Cooling for Digital
- Light Processors

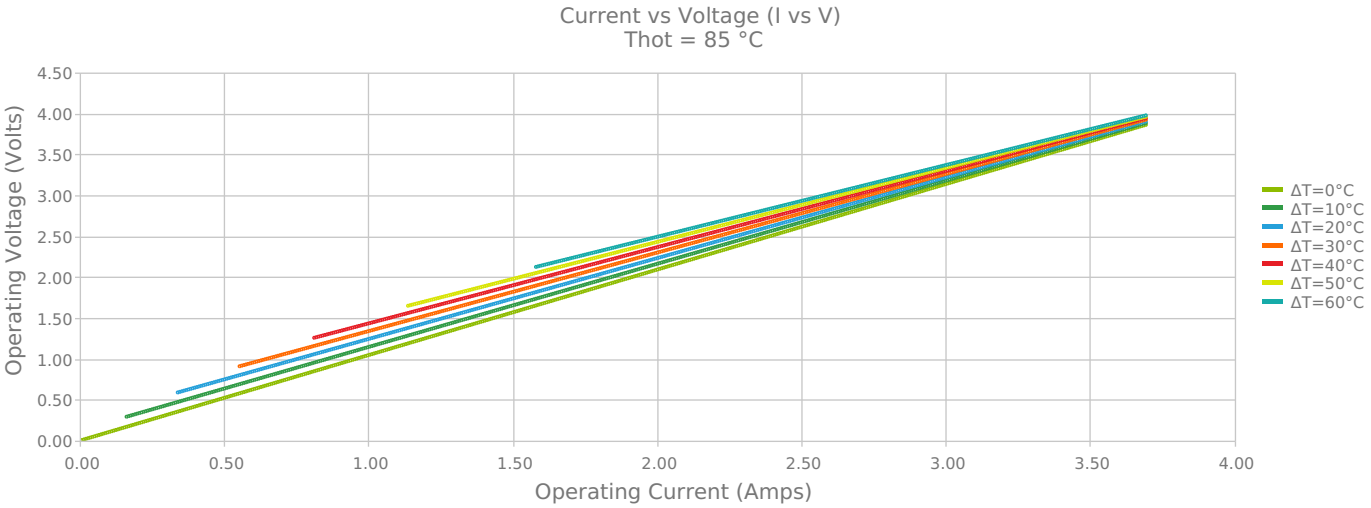




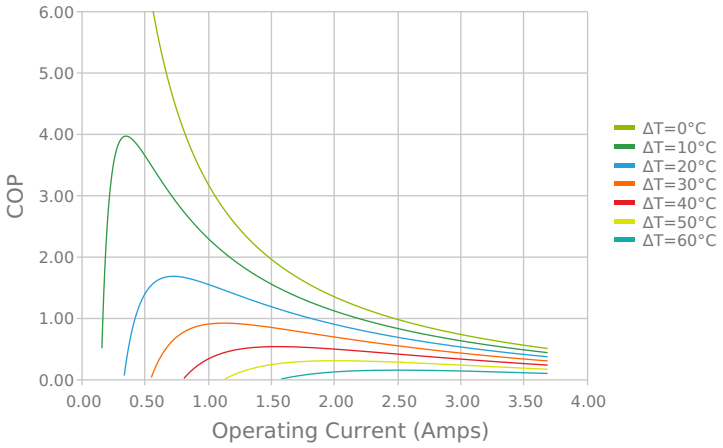
ELECTRICAL AND THERMAL PERFORMANCE







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



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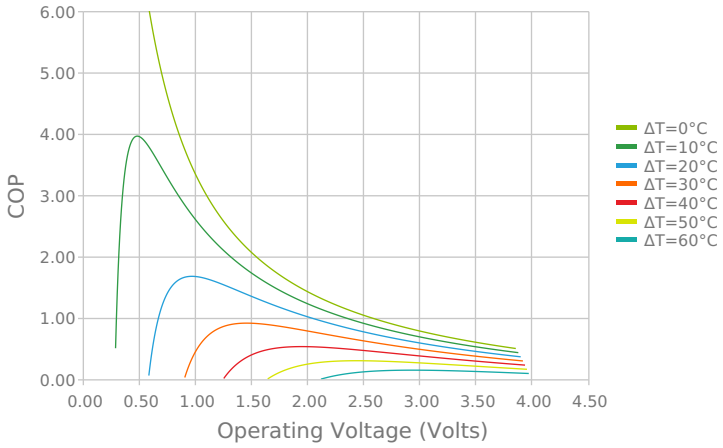
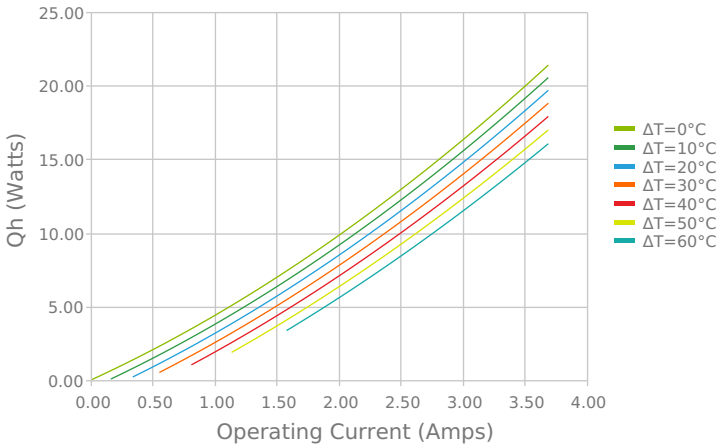


Total Heat Dissipated at Hot Side (Qh=Qc+Pin)
Thot = 85 °C



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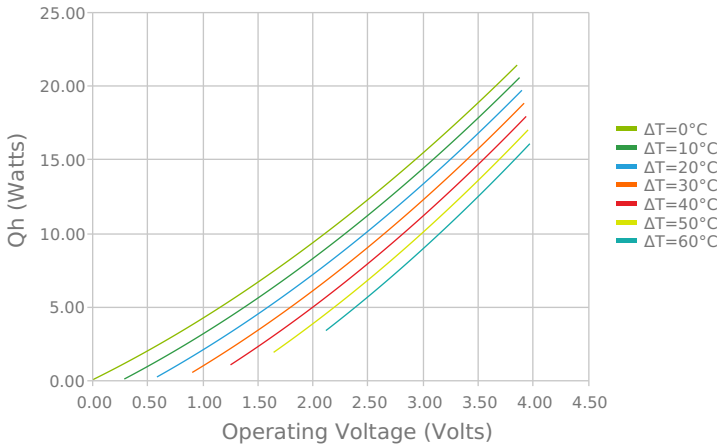
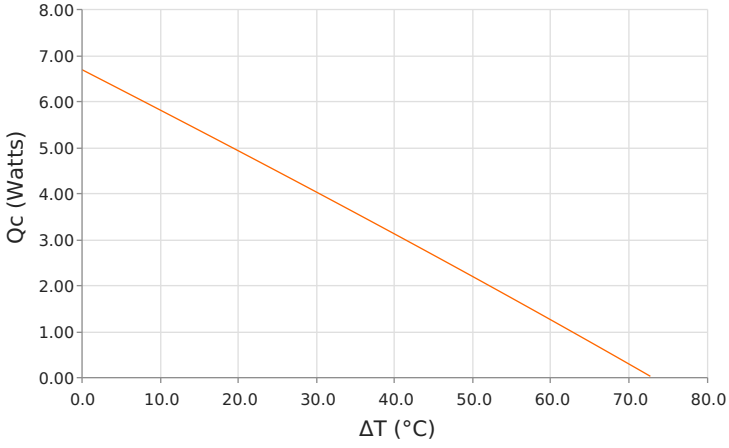
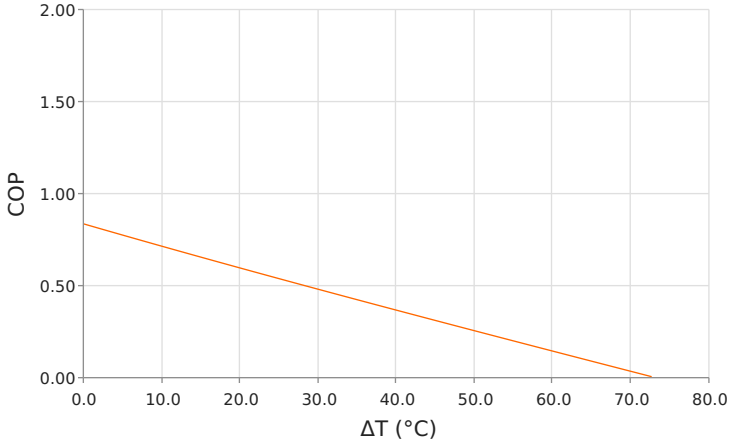


Heat Pumped at Cold Side (Qc)
Thot = 85 °C | Current = 2.8 Amps



Coefficient of Performance (COP = Qc/Pin)
Thot = 85 °C | Current = 2.8 Amps



SPECIFICATIONS*

Hot Side Temperature	50.0 °C	85.0 °C	110.0 °C
Qcmax (ΔT = 0)	7.7 Watts	8.3 Watts	8.6 Watts
ΔTmax (Qc = 0)	83.2°C	95.3°C	102.0°C
Imax (I @ ΔTmax)	3.2 Amps	3.1 Amps	3.0 Amps
Vmax (V @ ΔTmax)	4.1 Volts	4.7 Volts	5.1 Volts
Module Resistance	1.18 Ohms	1.37 Ohms	1.50 Ohms
Max Operating Temperature	150 °C		
Weight	4.0 gram(s)		

* Specifications reflect thermoelectric coefficients updated March 2020

FINISHING OPTIONS

Suffix	Thickness	Flatness / Parallelism	Hot Face	Cold Face	Lead Length
TA	3.600 ±0.254 mm 0.142 ± 0.010 in	0.025 mm / 0.025 mm 0.001 in / 0.001 in	Lapped	Lapped	152.4 mm 6.00 in

SEALING OPTIONS

Suffix	Sealant	Color	Temp Range	Description
	None			No sealing specified

NOTES

1. Max operating temperature: 150°C
2. Do not exceed Imax or Vmax when operating module
3. Reference assembly guidelines for recommended installation

Date: 07/22/2020