

ZT Series Thermoelectric Cooler

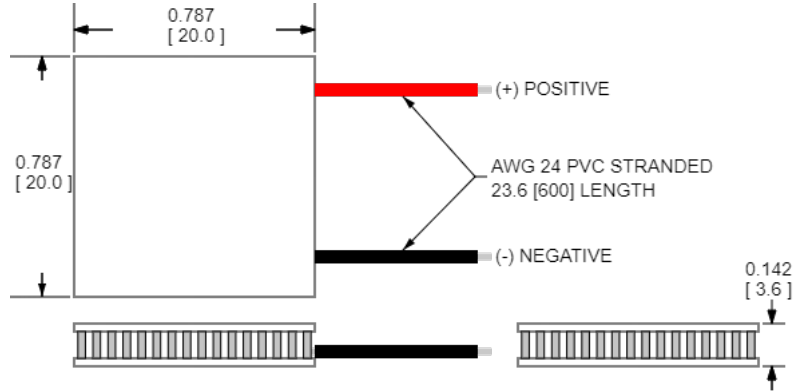
This product has reached end of production and is available on a limited basis only. This product series has been replaced with the HiTemp ETX Series product offering. Currently there is no standard HiTemp ETX Series replacement for this part. Contact Sales for available options.

Features

- High temperature differential
- Precise temperature control
- Reliable solid-state operation
- No sound or vibration
- DC operation
- 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

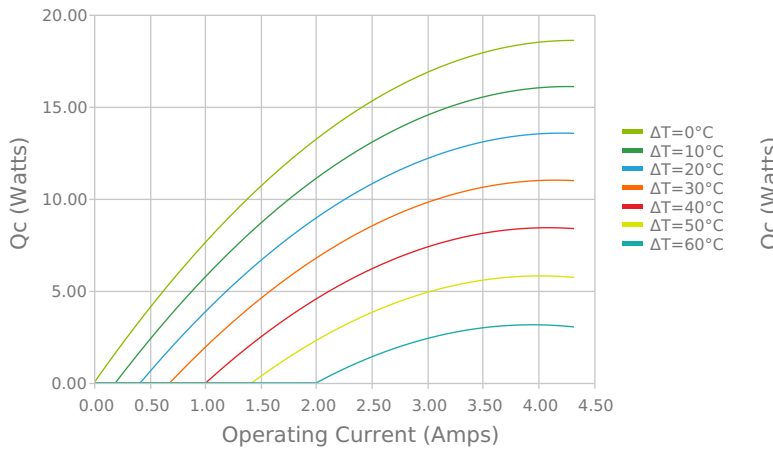


CERAMIC MATERIAL: Al₂O₃
SOLDER CONSTRUCTION: 138°C, BiSn

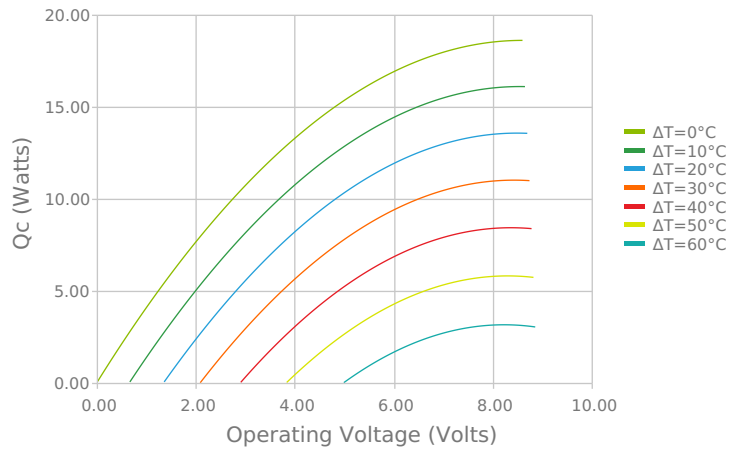
INCHES [MM]

ELECTRICAL AND THERMAL PERFORMANCE

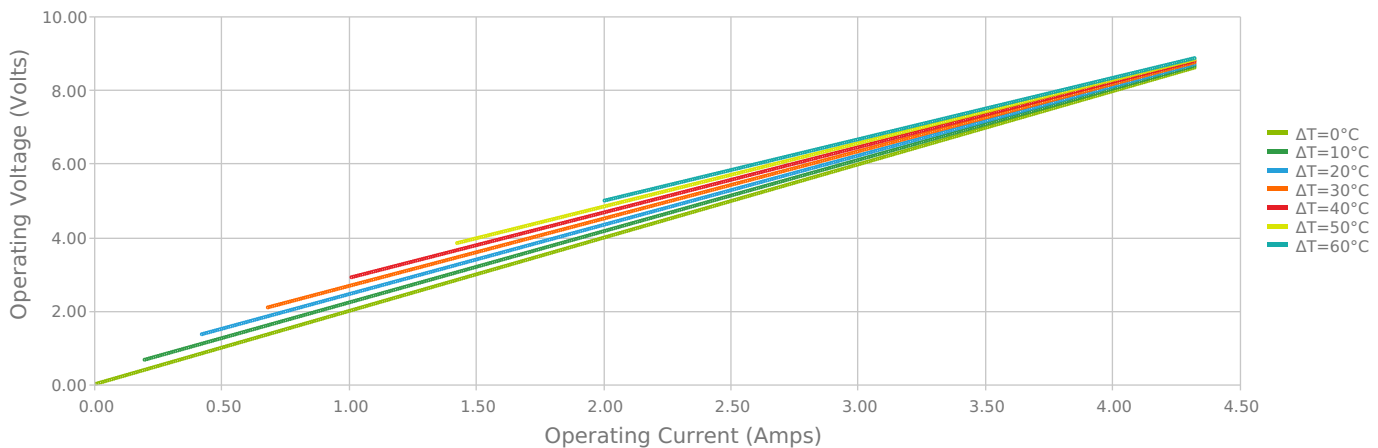
Heat Pumped at Cold Side
Thot = 27 °C



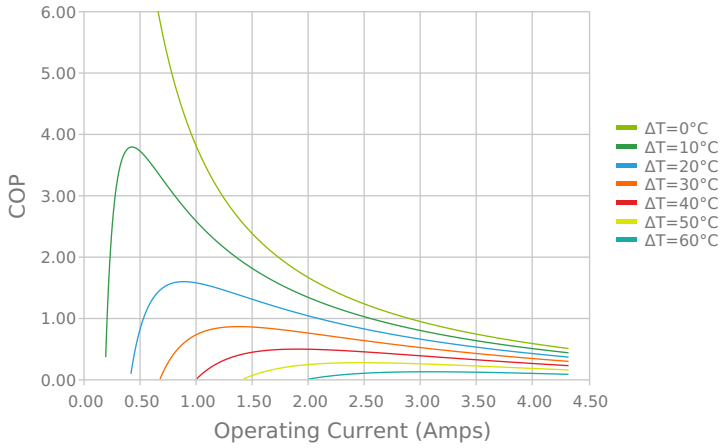
Heat Pumped at Cold Side
Thot = 27 °C



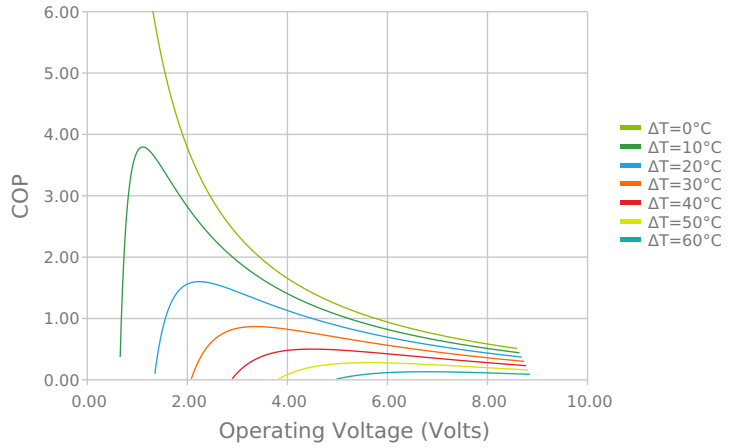
Current vs Voltage (I vs V)
Thot = 27 °C



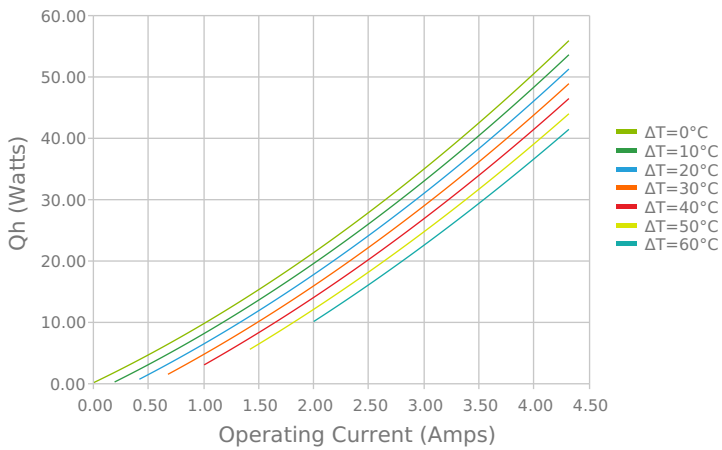
Coefficient of Performance (COP = Qc/Pin)
Thot = 27 °C



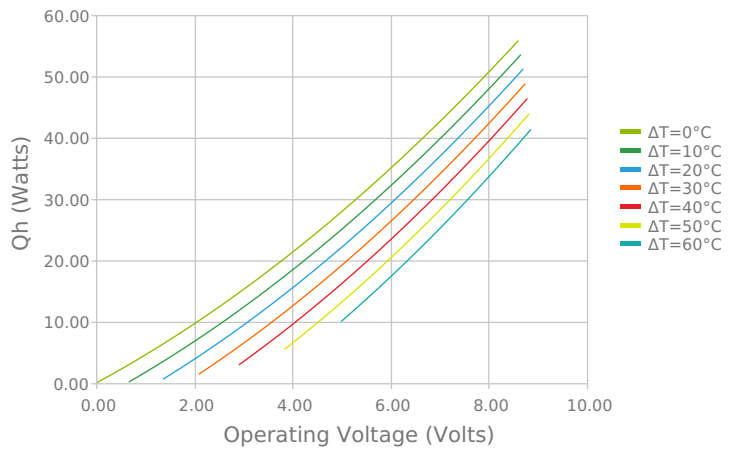
Coefficient of Performance (COP = Qc/Pin)
Thot = 27 °C



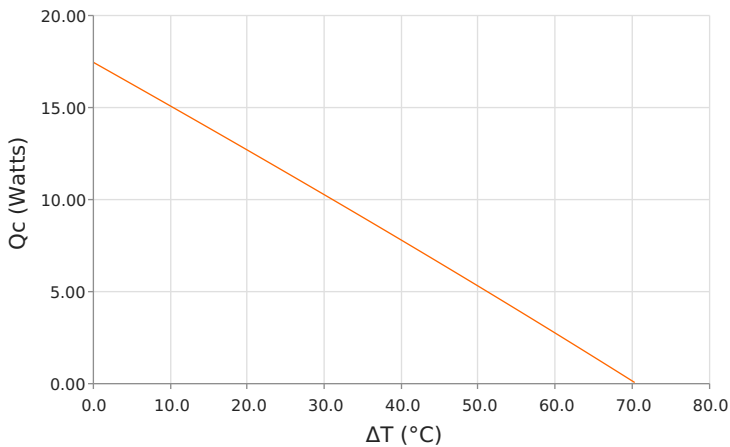
Total Heat Dissipated at Hot Side (Qh=Qc+Pin)
Thot = 27 °C



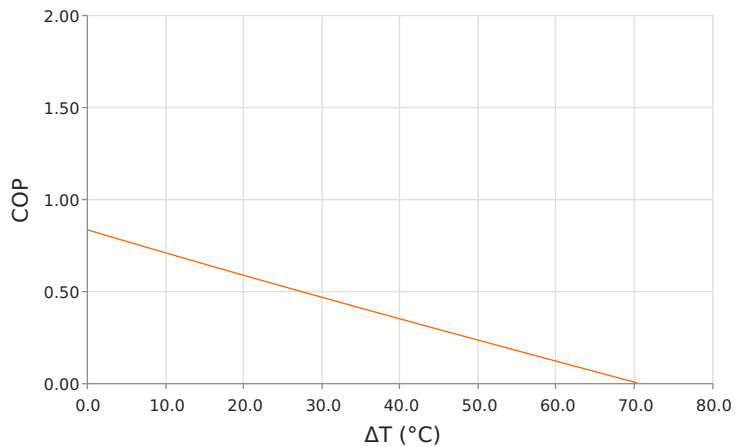
Total Heat Dissipated at Hot Side (Qh=Qc+Pin)
Thot = 27 °C



Heat Pumped at Cold Side (Qc)
Thot = 27 °C | Current = 3.2 Amps



Coefficient of Performance (COP = Qc/Pin)
Thot = 27 °C | Current = 3.2 Amps



SPECIFICATIONS*

Hot Side Temperature	27.0 °C	35.0 °C	50.0 °C
Qcmax ($\Delta T = 0$)	18.6 Watts	19.1 Watts	20.0 Watts
ΔT_{max} ($Q_c = 0$)	71.7°C	74.8°C	80.4°C
I_{max} (I @ ΔT_{max})	3.9 Amps	3.8 Amps	3.8 Amps
V_{max} (V @ ΔT_{max})	8.1 Volts	8.5 Volts	9.0 Volts
Module Resistance	1.99 Ohms	2.08 Ohms	2.24 Ohms
Max Operating Temperature	80 °C		
Weight	7.0 gram(s)		

* Specifications reflect thermoelectric coefficients updated March 2020

FINISHING OPTIONS

Suffix	Thickness	Flatness / Parallelism	Hot Face	Cold Face	Lead Length
TB	3.610 ±0.013 mm 0.142 ± 0.0005 in	0.013 mm / 0.013 mm 0.0005 in / 0.0005 in	Lapped	Lapped	203.2 mm 8.00 in

SEALING OPTIONS

Suffix	Sealant	Color	Temp Range	Description
	None			No sealing specified

NOTES

1. Max operating temperature: 80°C
2. Do not exceed I_{max} or V_{max} when operating module
3. Reference assembly guidelines for recommended installation

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