HiTemp ET Series ET6-3-F1-2020-TA-RT-W6
MFG Part Number: 387001837
Legacy Product

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: 387004943

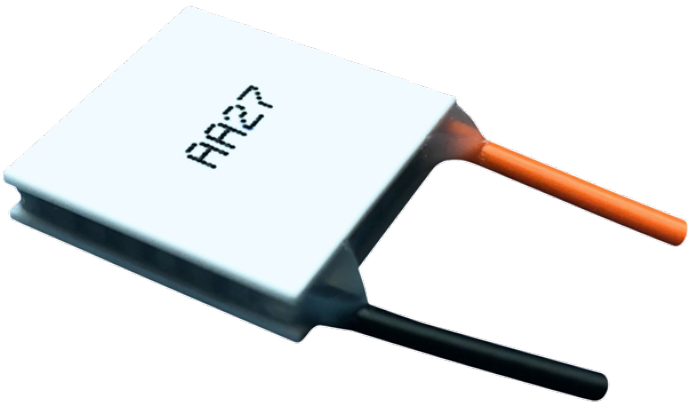
Description: ETX6-3-F1-2020-TA-RT-W6

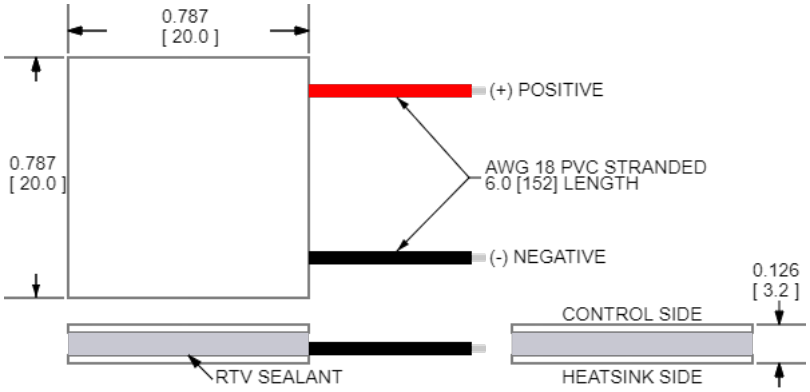
Features

- 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_2O_3

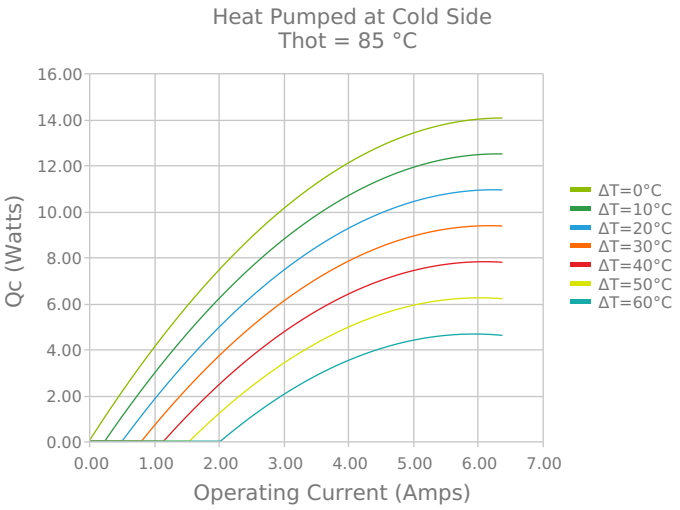
SOLDER CONSTRUCTION: 232°C, SbSn

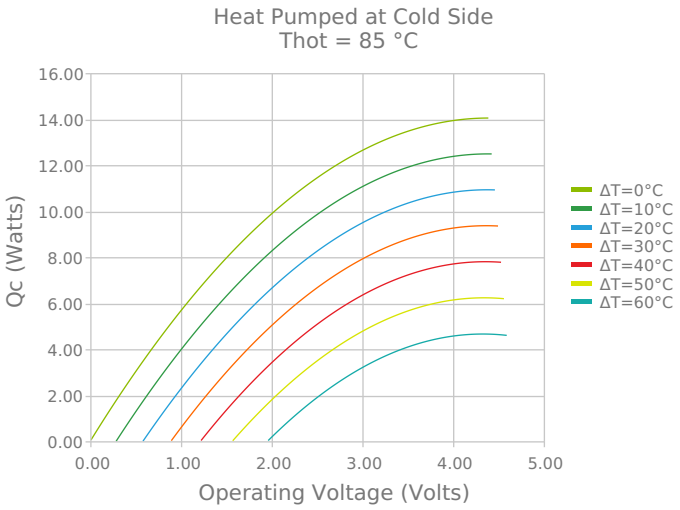
INCHES [MM]

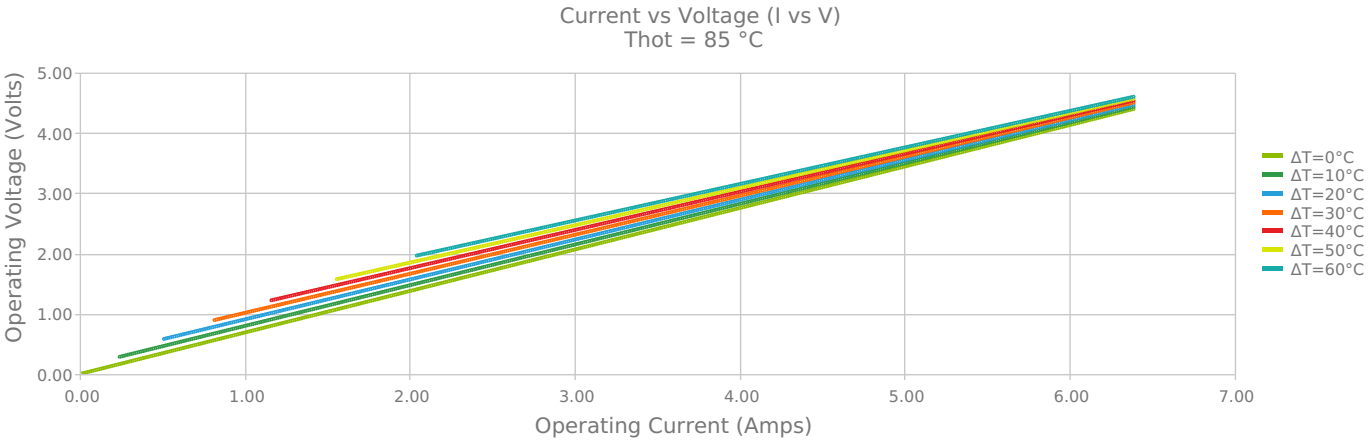
Note: Allow 0.020 in [0.5 mm] around perimeter of the thermoelectric cooler and lead wire attachment to accommodate sealant

ELECTRICAL AND THERMAL PERFORMANCE

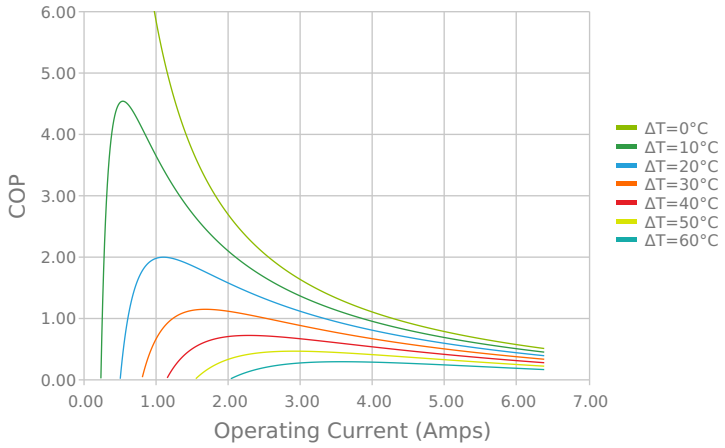
For maximum performance, be sure to orient the CONTROL side of the TEC against the application to be managed and the HEATSINK side against the heat sink or other heat rejection method. The CONTROL side is always opposite the side with lead attachments. Lead attachment is a passive heat loss and less impactful if located on the side that attaches to the heat exchanger.



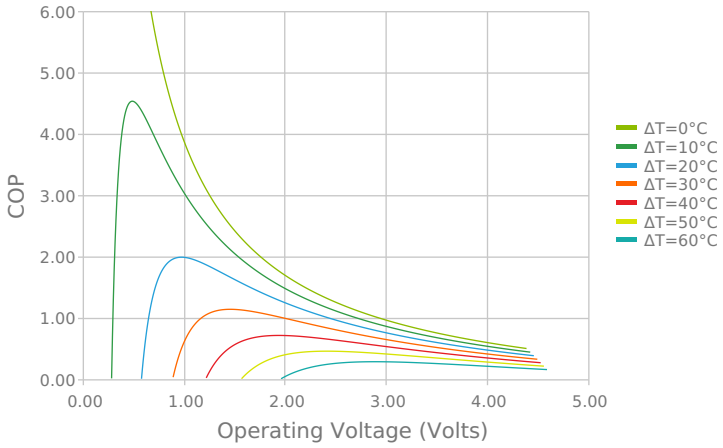




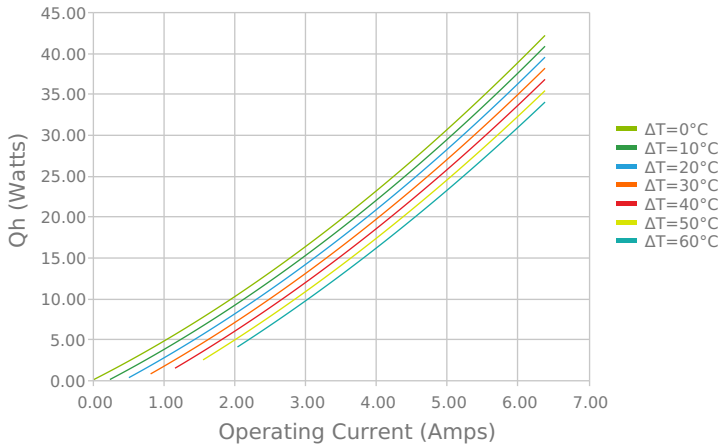
Coefficient of Performance (COP = Qc/Pin)
Thot = 85 °C



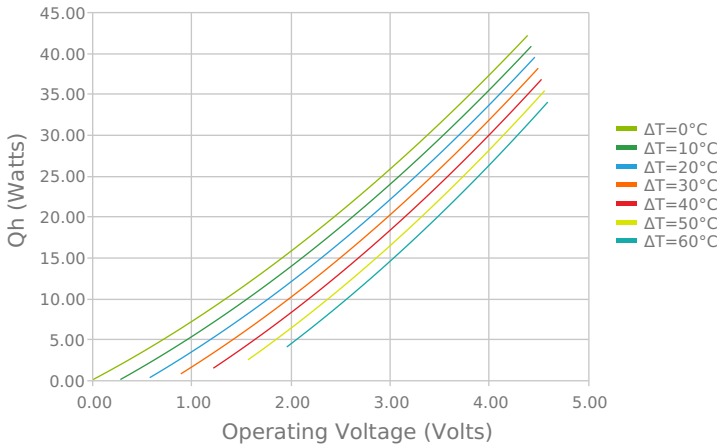
Coefficient of Performance (COP = Qc/Pin)
Thot = 85 °C



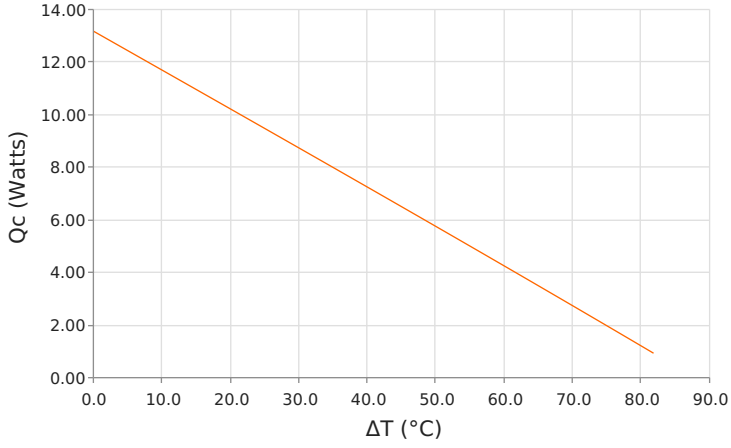
Total Heat Dissipated at Hot Side (Qh=Qc+Pin)
Thot = 85 °C



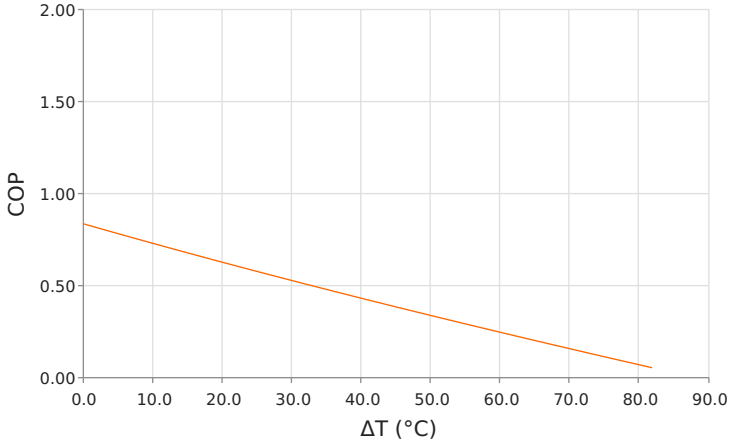
Total Heat Dissipated at Hot Side (Qh=Qc+Pin)
Thot = 85 °C



Heat Pumped at Cold Side (Qc)
Thot = 85 °C | Current = 4.8 Amps



Coefficient of Performance (COP = Qc/Pin)
Thot = 85 °C | Current = 4.8 Amps



SPECIFICATIONS*

Hot Side Temperature	50.0 °C	85.0 °C	110.0 °C
Qcmax (ΔT = 0)	12.8 Watts	14.0 Watts	14.7 Watts
ΔTmax (Qc = 0)	77.9°C	89.3°C	96.2°C
Imax (I @ ΔTmax)	5.8 Amps	5.7 Amps	5.6 Amps
Vmax (V @ ΔTmax)	3.7 Volts	4.3 Volts	4.7 Volts
Module Resistance	0.59 Ohms	0.69 Ohms	0.75 Ohms
Max Operating Temperature	150 °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
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 Imax or Vmax when operating module
3. Reference assembly guidelines for recommended installation

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Revision: 00 Date: 06-01-2022

Print Date: 06-15-2022