HiTemp ET Series ET20-24-F2A-0709-11-RT-W2.25 **MFG Part Number: 430544-507** 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: 387006908 Description: OTX20-24-F2A-0709-11-RT-W2.25

Features



- Reliable solid-state
- RoHS-compliant
- **Applications** Peltier Cooling for Refrigerated Centrifuges • Peltier Cooling for Machine Vision No sound or vibration • Thermoelectric Cooling for CMOS Sensors Cooling Solutions for Autonomous Systems Environmentally-friendly Peltier Cooling for Digital Light Processors 0.425 [10.8] (+) POSITIVE 0.260 AWG 30 SOLID, BARE 2.3 [57] LENGTH [6.6] (-) NEGATIVE 0.071 0.346 [1.8] [8.8] CONTROL SIDE ŧ. RTV SEALANT HEATSINK SIDE

CERAMIC MATERIAL: Al2O3

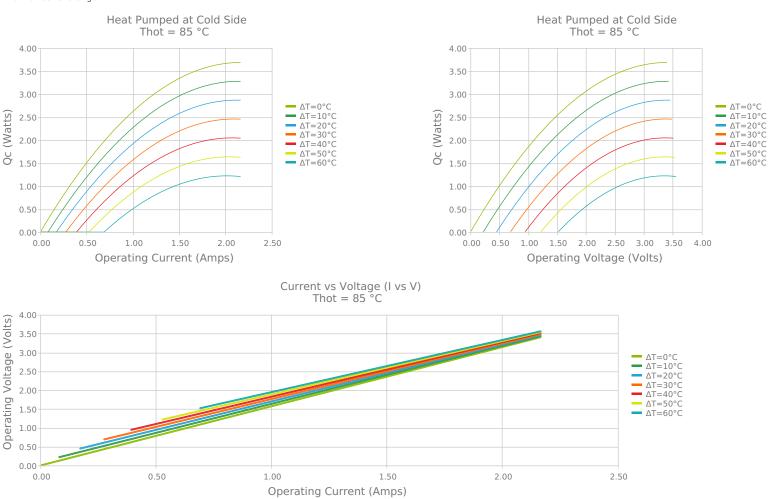
INCHES [MM]

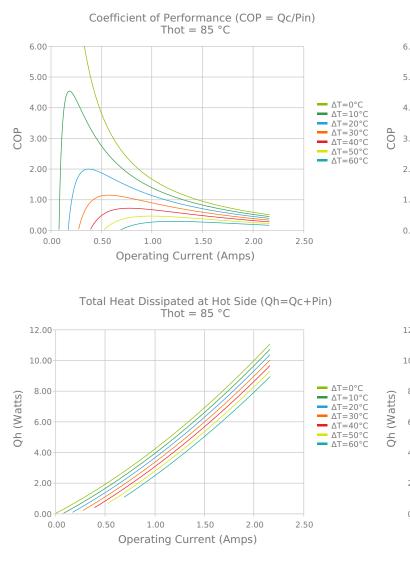
SOLDER CONSTRUCTION: 232°C, SbSn Note: Allow 0.020 in [0.5 mm] around perimeter of the thermoelectric cooler and lead wire attachment to accommodate sealant

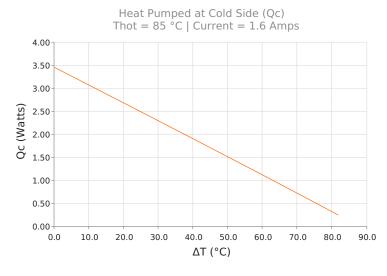
ELECTRICAL AND THERMAL PERFORMANCE

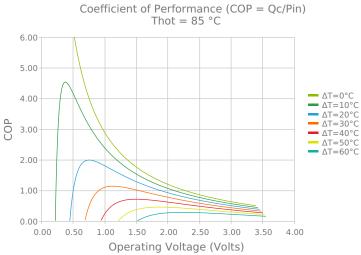
CUCLU

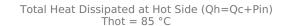
For maximum performance, be sure to orient the CONTROL side of the TEC against the application to be managed and the HEATSINK side against the heat sink or other heat rejection method. The CONTROL side is always opposite the side with lead attachments. Lead attachment is a passive heat loss and less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

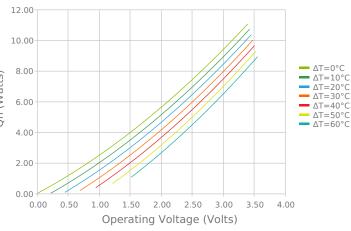




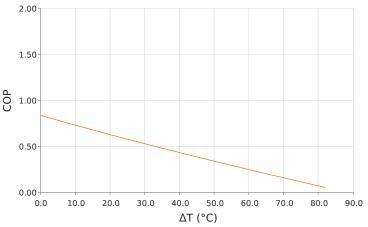








Coefficient of Performance (COP = Qc/Pin) Thot = $85 \degree C$ | Current = 1.6 Amps



SPECIFICATIONS*

Hot Side Temperature	50.0 °C	85.0 °C	110.0 °C
$Qcmax (\Delta T = 0)$	3.4 Watts	3.7 Watts	3.8 Watts
ΔTmax (Qc = 0)	77.9°C	89.3°C	96.2°C
lmax (I @ ΔTmax)	2.0 Amps	1.9 Amps	1.9 Amps
Vmax (V @ ΔTmax)	2.9 Volts	3.3 Volts	3.6 Volts
Module Resistance	1.35 Ohms	1.57 Ohms	1.72 Ohms
Max Operating Temperature	150 °C		
Weight	1.0 gram(s)		

* Specifications reflect thermoelectric coefficients updated March 2020

FINISHING OPTIONS

Suffix	Thickness	Flatness / Parallelism	Hot Face	Cold Face	Lead Length
11	1.800 ±0.051 mm 0.071 ± 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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