

ZT Series Thermoelectric Cooler Features Applications • High temperature differential Peltier Cooling for Refrigerated Centrifuges Note: This product is not recommended for new designs. • Precise temperature control • Peltier Cooling for Machine Vision This product series has been replaced with the HiTemp ETX Series. • Reliable solid-state operation • Thermoelectric Cooling for CMOS Sensors The recommended replacement is: No sound or vibration • Cooling Solutions for Autonomous Systems MFG Part Number: 387004966 DC operation • Peltier Cooling for Digital Description: ETX6-7-F1-3030-TA-RT-W8 Light Processors RoHS-compliant 1.181 [30.0] (+) POSITIVE 1 181 WG 22 PVC STRANDED .0 [203] LENGTH [30.0 (-) NEGATIVE 0.154 13.91 CONTROL SIDE RTV SEALANT HEATSINK SIDE

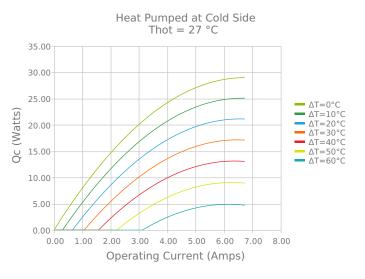
CERAMIC MATERIAL: Al₂O₃ SOLDER CONSTRUCTION: 138°C, BiSn

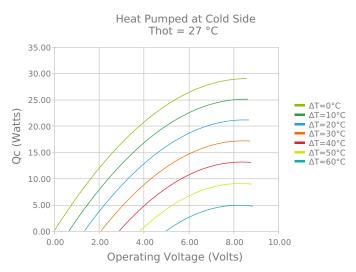
INCHES [MM]

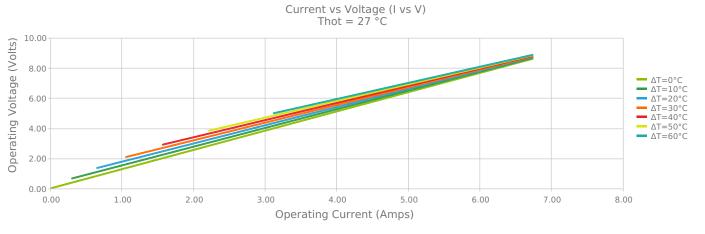
Note: Allow 0.020 in [0.5 mm] around perimeter of the thermoelectric cooler and lead wire attachment to accommodate sealant

ELECTRICAL AND THERMAL PERFORMANCE

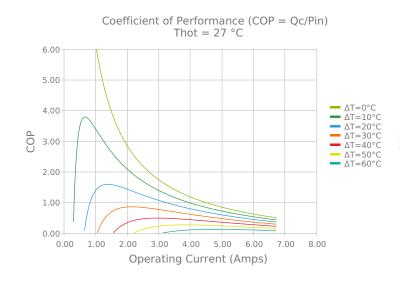
For maximum performance, be sure to orient the CONTROL side of the TEC against the application to be managed and the HEATSINK side against the heat sink or other heat rejection method. The CONTROL side is always opposite the side with lead attachments. Lead attachment is a passive heat loss and less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

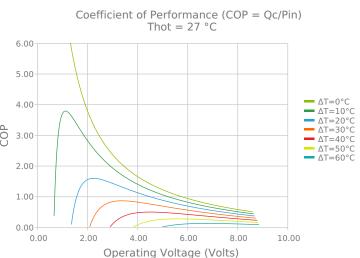


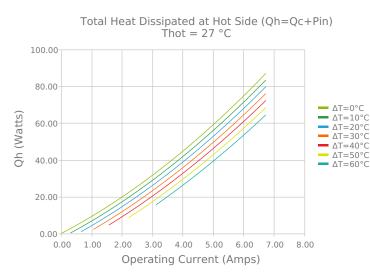


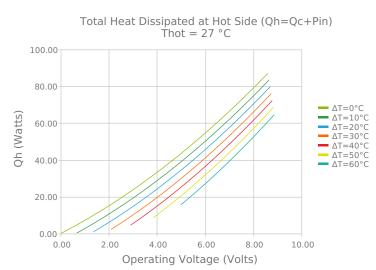


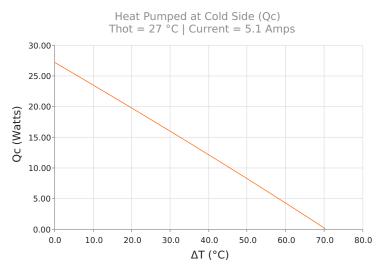


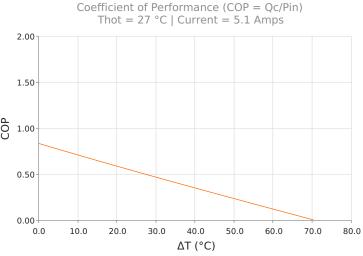














SPECIFICATIONS*

Hot Side Temperature

 $Qcmax (\Delta T = 0)$

 $\Delta T max (Qc = 0)$

Imax (I @ \Darkstrum \

Vmax (V @ Δ Tmax)

Module Resistance

Max Operating Temperature

Weight

27.0 °C	35.0 °C	50.0 °C
29.0 Watts	29.8 Watts	31.2 Watts
71.7°C	74.8°C	80.4°C
6.0 Amps	6.0 Amps	5.9 Amps
8.1 Volts	8.5 Volts	9.0 Volts
1.28 Ohms	1.33 Ohms	1.44 Ohms
80 °C		
13.0 gram(s)		

FINISHING OPTIONS

Suffix	Thickness	Flatness / Parallelism	Hot Face	Cold Face	Lead Length	
TA	3.910 ±0.025 mm 0.154 ± 0.0010 in	0.025 mm / 0.025 mm 0.001 in / 0.001 in	Lapped	Lapped	203.2 mm 8.00 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: 80°C
- 2. Do not exceed Imax or Vmax when operating module
- 3. Reference assembly guidelines for recommended installation

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^{*} Specifications reflect thermoelectric coefficients updated March 2020