

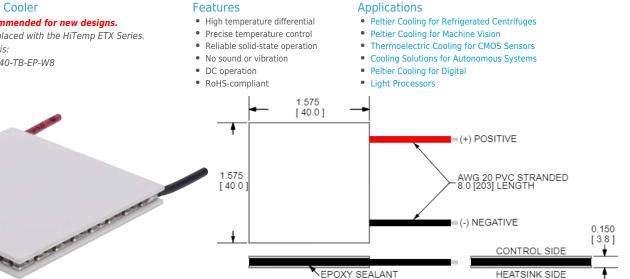
#### ZT Series Thermoelectric Cooler

Note: This product is not recommended for new designs. This product series has been replaced with the HiTemp ETX Series. The recommended replacement is:

Description: ETX8-12-F1-4040-TB-EP-W8

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#### **Features**



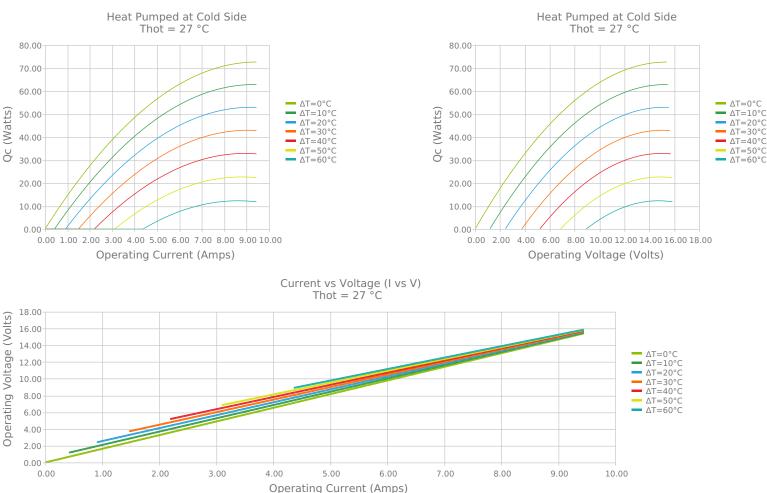
CERAMIC MATERIAL: Al2O3 SOLDER CONSTRUCTION: 138°C, BISn

INCHES [ MM ]

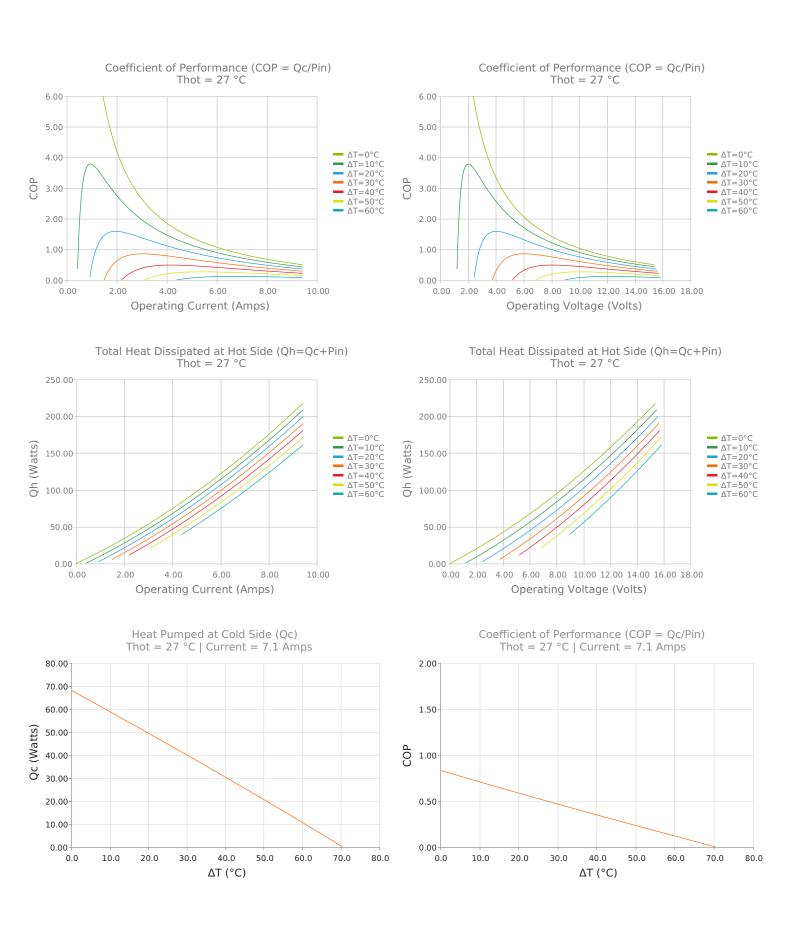
Note: Allow 0.020 in [0.5 mm] around perimeter of the thermoelectric cooler and lead wire attachment to accommodate sealant

### **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	27.0 °C	35.0 °C	50.0 °C
$Qcmax (\Delta T = 0)$	72.6 Watts	74.6 Watts	78.1 Watts
ΔTmax (Qc = 0)	71.7°C	74.8°C	80.4°C
lmax (I @ ΔTmax)	8.4 Amps	8.3 Amps	8.2 Amps
Vmax (V @ ΔTmax)	14.6 Volts	15.1 Volts	16.2 Volts
Module Resistance	1.63 Ohms	1.70 Ohms	1.84 Ohms
Max Operating Temperature	80 °C		
Weight	26.0 gram(s)		

\* Specifications reflect thermoelectric coefficients updated March 2020

## **FINISHING OPTIONS**

Suffix	Thickness	Flatness / Parallelism	Hot Face	Cold Face	Lead Length
ТВ	3.810 ±0.013 mm 0.150 ± 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
EP	Ероху	Black	-55 to 150°C	Low density syntactic foam epoxy encapsulant

# 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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