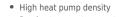


# UltraTEC<sup>™</sup> UTX Series UTX6-24-F1-5555-TA-W8 MFG Part Number: 387004993

#### UltraTEC<sup>™</sup> UTX Series Thermoelectric Cooler

The UTX6-24-F1-5555-TA-W8 is a high-performance thermoelectric cooler that is assembled with advanced thermoelectric materials and can boost cooling capacity by up to 10%. The UltraTEC UTX Series features a higher thermal insulating barrier when compared to standard materials creating a maximum temperature differential ( $\Delta T$ ) of 71.7 °C at Qc = 0. It has a maximum Qc of 100 Watts when  $\Delta T = 0$ .

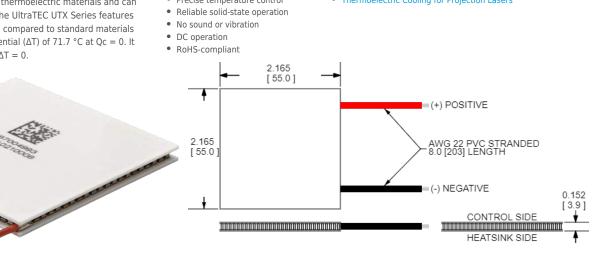
#### **Features**



• Precise temperature control



- Spot Cooling for Industrial Lasers & Optics
- Thermoelectric Cooling for Projection Lasers

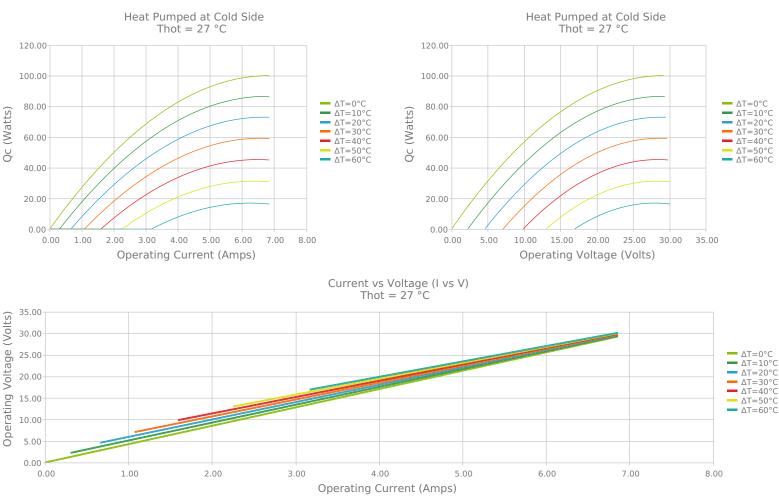


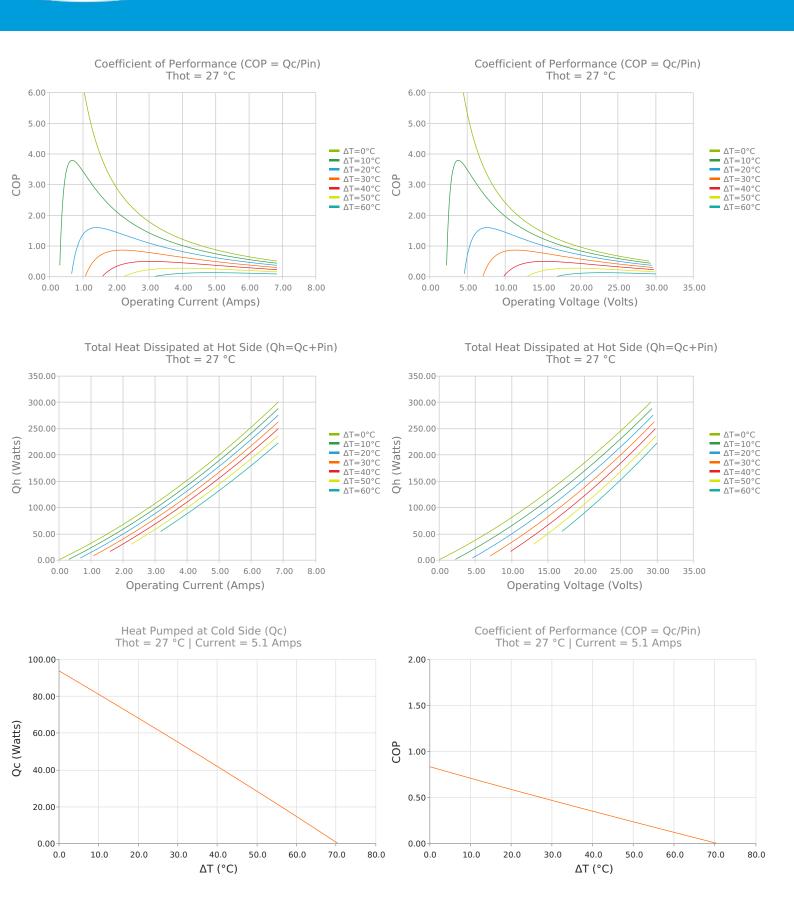
CERAMIC MATERIAL: Al2O3 SOLDER CONSTRUCTION: 138°C, BiSn

INCHES [ MM ]

#### **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 (ΔT = 0)	100.0 Watts	102.8 Watts	107.7 Watts
ΔTmax (Qc = 0)	71.7°C	74.8°C	80.4°C
lmax (I @ ΔTmax)	6.1 Amps	6.1 Amps	6.0 Amps
Vmax (V @ ΔTmax)	27.6 Volts	28.7 Volts	30.7 Volts
Module Resistance	4.26 Ohms	4.45 Ohms	4.80 Ohms
Max Operating Temperature	80 °C		
Weight	41.0 gram(s)		

\* Specifications reflect thermoelectric coefficients updated March 2020

## **FINISHING OPTIONS**

Suffix	Thickness	Flatness / Parallelism	Hot Face	Cold Face	Lead Length
ТА	3.861 ±0.025 mm 0.152 ± 0.0010 in	0.025 mm / 0.025 mm 0.001 in / 0.001 in	Lapped	Lapped	152.4 mm 6.00 in

## **SEALING OPTIONS**

Suffix	Sealant	Color	Temp Range	Description
	None			No sealing specified

## **NOTES**

- 1. Max operating temperature: 80°C
- 2. Do not exceed Imax or Vmax when operating module
- 3. Reference assembly guidelines for recommended installation
- 4. Recommended to be used with a liquid heat exchanger on the hot side

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