

### UltraTEC™ UT Series Thermoelectric Cooler

### Note: This product is not recommended for new designs.

This product series has been replaced with the UltraTEC UTX Series. The recommended replacement is:

MFG Part Number: 387004685

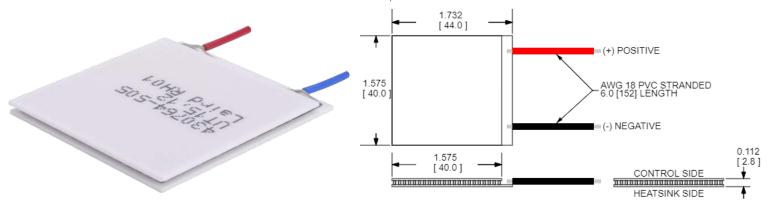
Description: UTX15-12-F2-4040-TA-W6

#### **Features**

- High heat pump density
- Precise temperature control
- Reliable solid-state operation
- No sound or vibrationDC operation
- RoHS-compliant

#### **Applications**

- Thermoelectric Coolers and Assemblies for Medical Applications
- Thermoelectric Coolers for Handheld Cosmetic Lasers
- Industrial Laser Cooling
- Peltier Cooling for Digital Light Processors

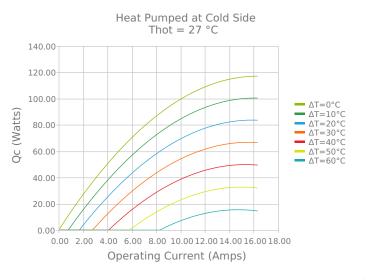


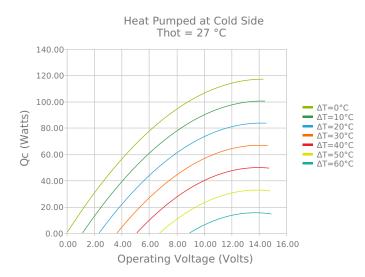
CERAMIC MATERIAL: Al<sub>2</sub>O<sub>3</sub>
SOLDER CONSTRUCTION: 138°C, BiSn

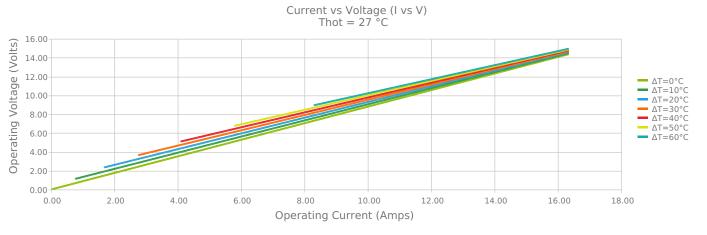
INCHES [ MM ]

### **ELECTRICAL AND THERMAL PERFORMANCE**

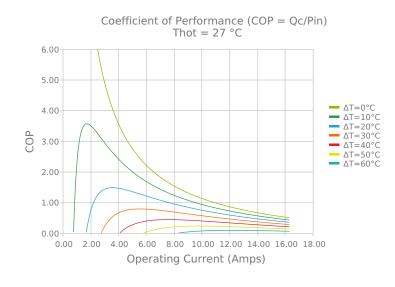
For maximum performance, be sure to orient the CONTROL side of the TEC against the application to be managed and the HEATSINK side against the heat sink or other heat rejection method. The CONTROL side is always opposite the side with lead attachments. Lead attachment is a passive heat loss and less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

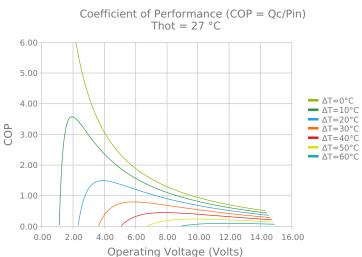


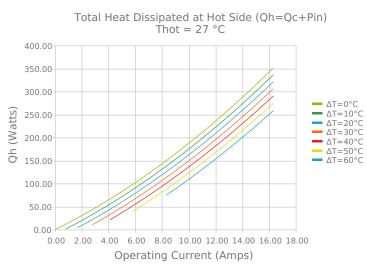


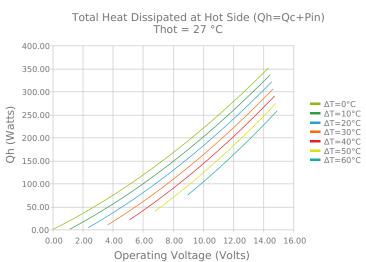


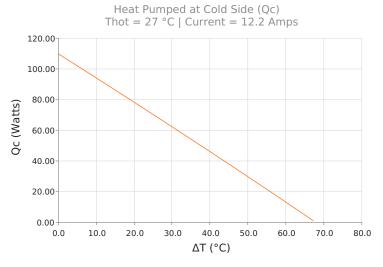


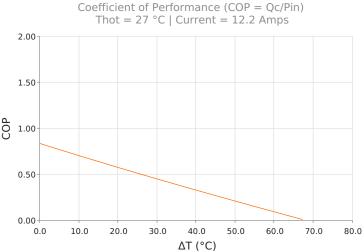












**Legacy Product** 



# **SPECIFICATIONS\***

**Hot Side Temperature** 

 $Qcmax (\Delta T = 0)$ 

 $\Delta T max (Qc = 0)$ 

Imax (I @ ATmax)

Vmax (V @  $\Delta$ Tmax)

**Module Resistance** 

**Max Operating Temperature** 

Weight

<sup>\*</sup> Specifications reflect thermoelectric coefficients updated March 2020

27.0 °C	35.0 °C	50.0 °C
117.1 Watts	120.7 Watts	126.9 Watts
68.9°C	71.8°C	77.0°C
14.4 Amps	14.4 Amps	14.2 Amps
13.6 Volts	14.2 Volts	15.1 Volts
0.88 Ohms	0.92 Ohms	0.98 Ohms
80 °C		
20.0 gram(s)		

## **FINISHING OPTIONS**

	Suffix Thickness		Flatness / Parallelism	<b>Hot Face</b>	Cold Face  Lapped	<b>Lead Length</b>	
TA 2.845 ±0.025 mm 0.112 ± 0.0010 in			0.025 mm / 0.025 mm 0.001 in / 0.001 in	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

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