

UltraTEC[™] UT Series UT8-12-F2-2525-TA-W6 MFG Part Number: 430745-510 Legacy Product

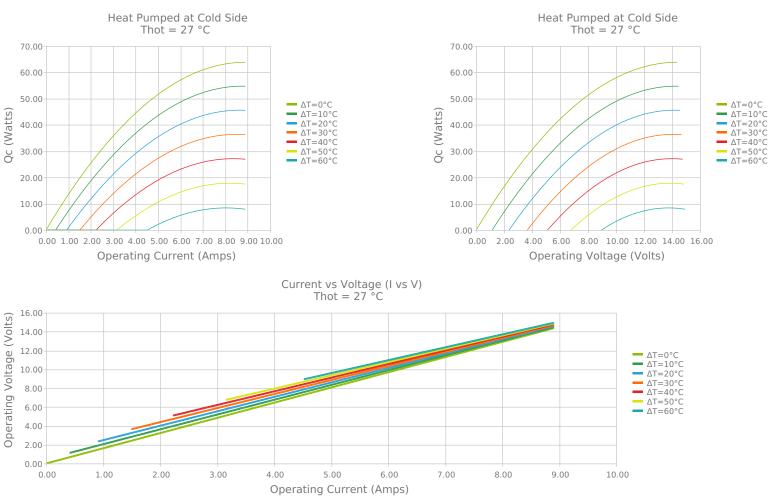
UltraTEC[™] UT Series Thermoelectric Cooler **Features Applications** Note: This product is not recommended for new designs. Thermoelectric Coolers and Assemblies for Medical Applications High heat pump density • Precise temperature control Thermoelectric Coolers for Handheld Cosmetic Lasers This product series has been replaced with the UltraTEC UTX Series. • Reliable solid-state operation • Industrial Laser Cooling The recommended replacement is: No sound or vibration • Peltier Cooling for Digital Light Processors MFG Part Number: 387004705 DC operation Description: UTX8-12-F2-2525-TA-W6 RoHS-compliant 1.060 [26.9] (+) POSITIVE 0.967 AWG 18 PVC STRANDED 6.0 [152] LENGTH [24.6 (-) NEGATIVE 0.077 0.958 [2.0] [24.3] CONTROL SIDE ŧ. HEATSINK SIDE

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

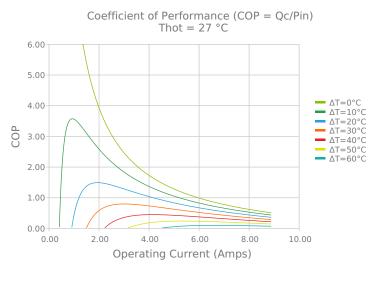
INCHES [MM]

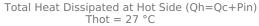
ELECTRICAL AND THERMAL PERFORMANCE

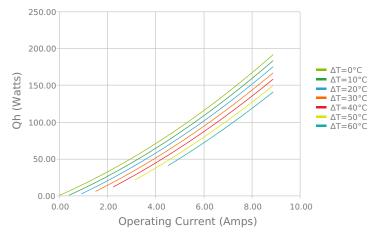
For maximum performance, be sure to orient the CONTROL side of the TEC against the application to be managed and the HEATSINK side against the heat sink or other heat rejection method. The CONTROL side is always opposite the side with lead attachments. Lead attachment is a passive heat loss and less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

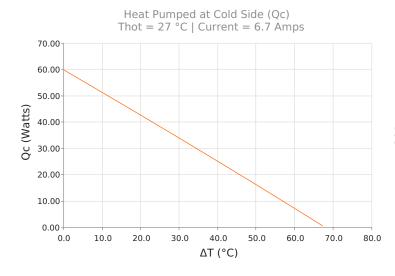


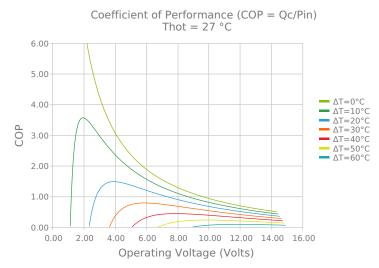




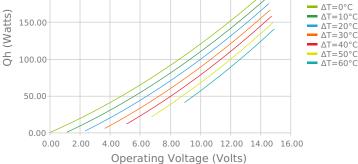




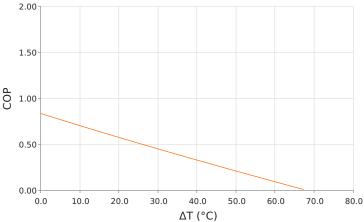








Coefficient of Performance (COP = Qc/Pin) Thot = $27 \degree C$ | Current = 6.7 Amps



SPECIFICATIONS*

Hot Side Temperature	27.0 °C	35.0 °C	50.0 °C
$Qcmax (\Delta T = 0)$	63.8 Watts	65.8 Watts	69.2 Watts
$\Delta T max (Qc = 0)$	68.9°C	71.8°C	77.0°C
lmax (I @ ΔTmax)	7.9 Amps	7.8 Amps	7.8 Amps
Vmax (V @ ΔTmax)	13.6 Volts	14.2 Volts	15.1 Volts
Module Resistance	1.61 Ohms	1.68 Ohms	1.81 Ohms
Max Operating Temperature	80 °C		
Weight	7.0 gram(s)		

* Specifications reflect thermoelectric coefficients updated March 2020

FINISHING OPTIONS

Suffix	Thickness	Flatness / Parallelism	Hot Face	Cold Face	Lead Length
ТА	1.956 ±0.025 mm 0.077 ± 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

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