# UltraTEC<sup>™</sup> UT Series UT15-288-F2-5252-TA-RT-W6 MFG Part Number: 430857-501 Legacy Product

#### UltraTEC<sup>™</sup> 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: 387004691 DC operation Description: UTX15-288-F2-5252-TA-RT-W6 RoHS-compliant 2.205 [56.0] (+) POSITIVE 2.047 AWG 20 PVC STRANDED 6.0 [152] LENGTH [ 52.0 (-) NEGATIVE 0.130 2.047 [3.3] [52.0] CONTROL SIDE RTV SEALANT HEATSINK SIDE

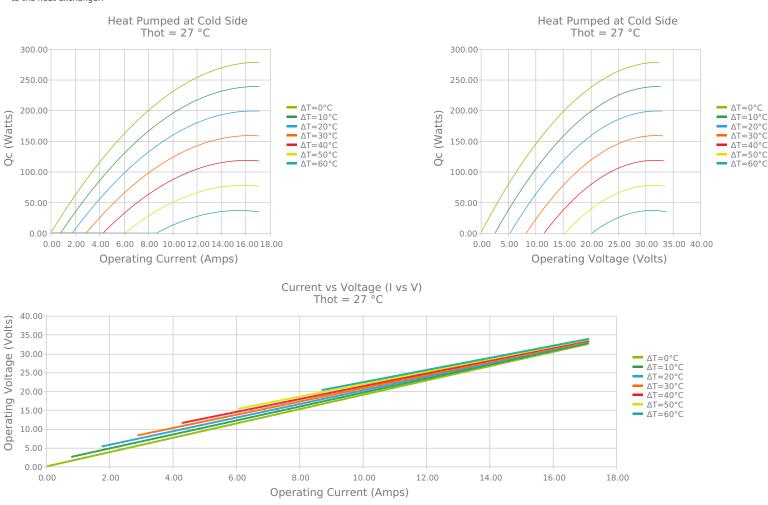
CERAMIC MATERIAL: Al2O3

INCHES [ MM ]

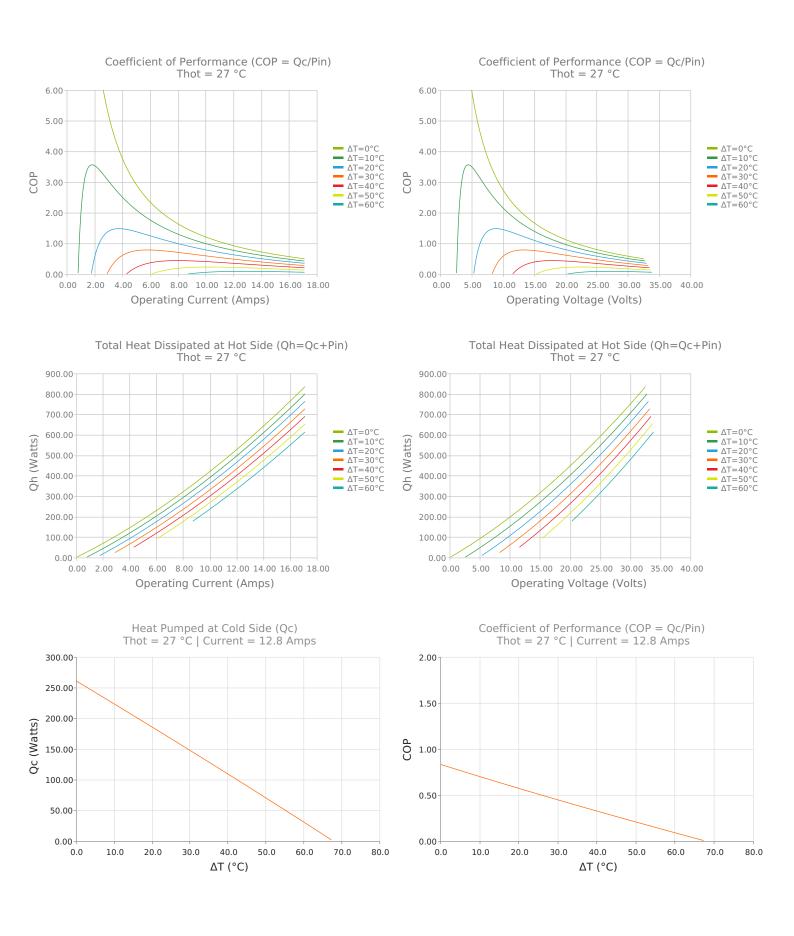
SOLDER CONSTRUCTION: 138°C, BISn Note: Allow 0.020 in [0.5 mm] around perimeter of the thermoelectric cooler and lead wire attachment to accommodate sealant

#### **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
$Qcmax (\Delta T = 0)$	278.5 Watts	287.0 Watts	301.9 Watts
ΔTmax (Qc = 0)	68.9°C	71.8°C	77.0°C
lmax (I @ ΔTmax)	15.2 Amps	15.1 Amps	14.9 Amps
Vmax (V @ ΔTmax)	30.9 Volts	32.1 Volts	34.3 Volts
Module Resistance	1.90 Ohms	1.98 Ohms	2.13 Ohms
Max Operating Temperature	80 °C		
Weight	53.0 gram(s)		

\* Specifications reflect thermoelectric coefficients updated March 2020

# **FINISHING OPTIONS**

Suffix	Thickness	Flatness / Parallelism	Hot Face	Cold Face	Lead Length
ТА	3.300 ±0.025 mm 0.130 ± 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
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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