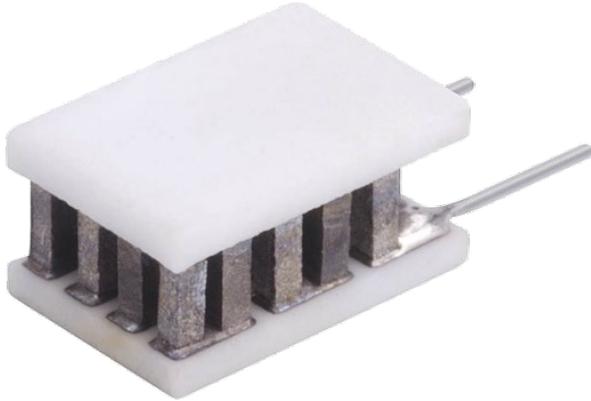


Note: This product has reached end of production and is available on a limited basis only. Recommended replacement is OT08-11-F1-0305-GG-W2.25, mfg part number 430834-503.

OptoTEC™ OT Series Thermoelectric Cooler

The OT08-11-F1-0305-TB-W2.25 is a miniature thermoelectric cooler. The OT08-11-F1-0305-TB-W2.25 is primarily used in applications to stabilize the temperature of sensitive optical components in the telecom and photonics industries. It has a maximum Qc of 0.5 Watts when $\Delta T = 0$ and a maximum ΔT of 68 °C at Qc = 0.

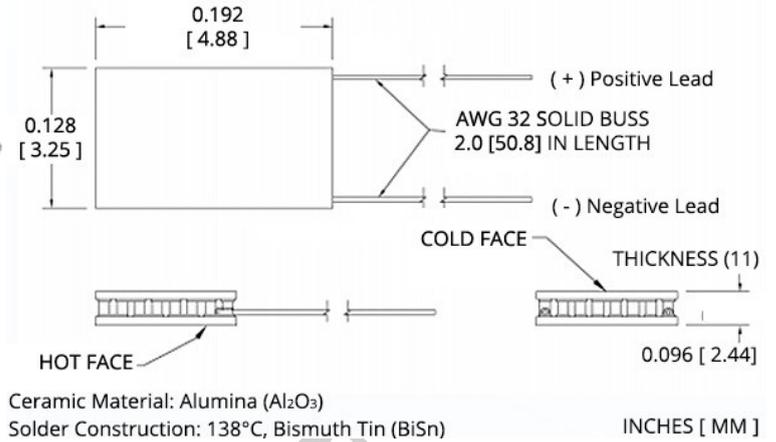


Features

- Miniature geometric sizes
- Precise temperature control
- Reliable solid-state operation
- No sound or vibration
- DC operation
- RoHS-compliant

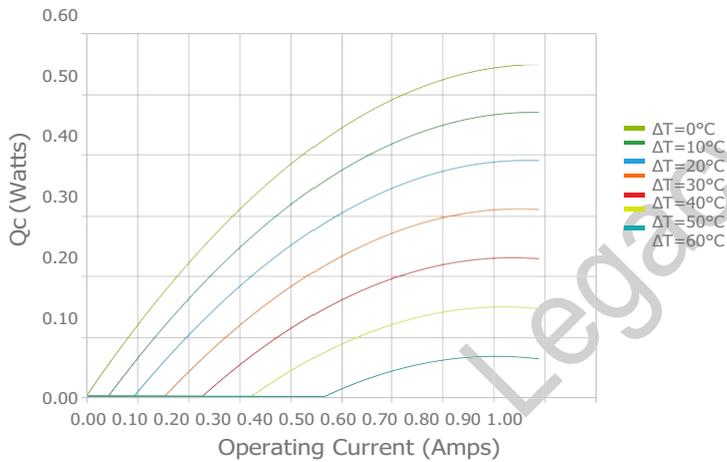
Applications

- [Thermoelectric Cooling for CMOS Sensors](#)
- [Cooling Solutions for Autonomous Systems](#)
- [Heads-Up Displays, Imaging Sensors](#)

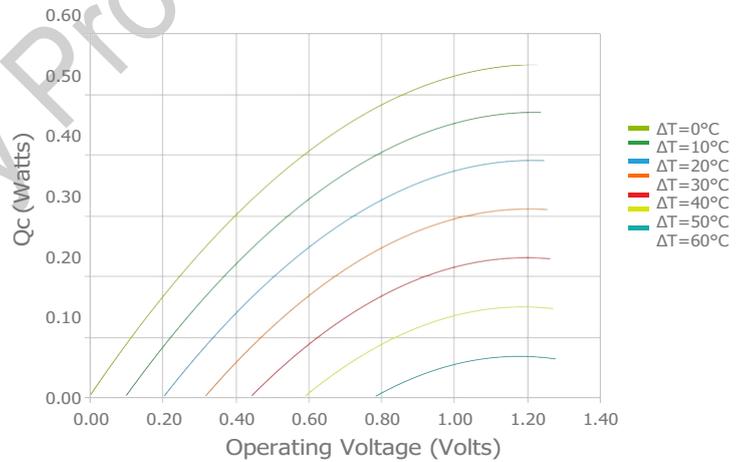


ELECTRICAL AND THERMAL PERFORMANCE

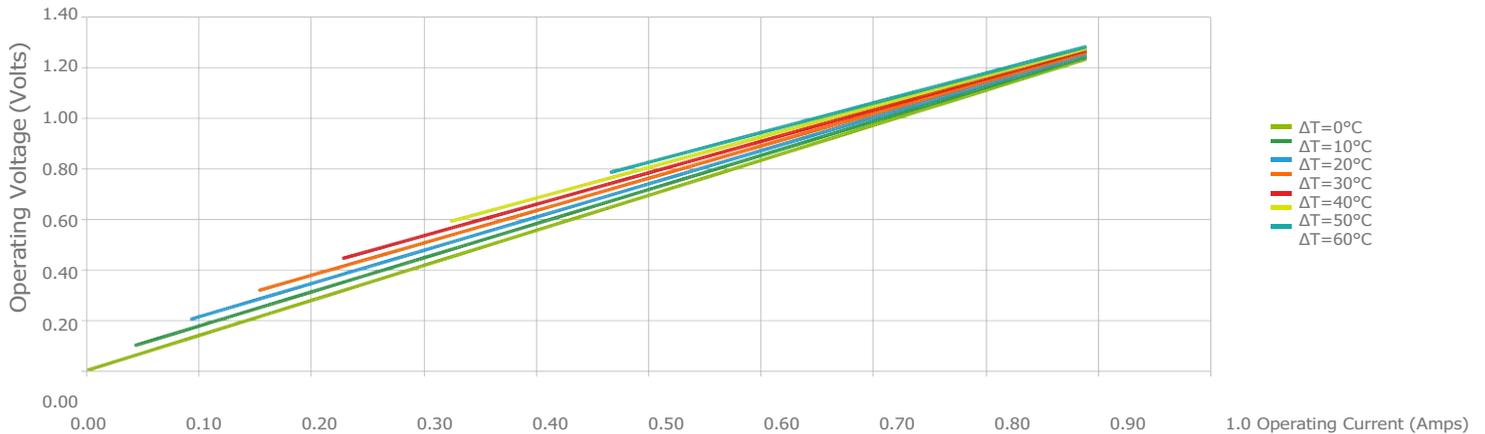
Heat Pumped at Cold Side
 Thot = 27 °C



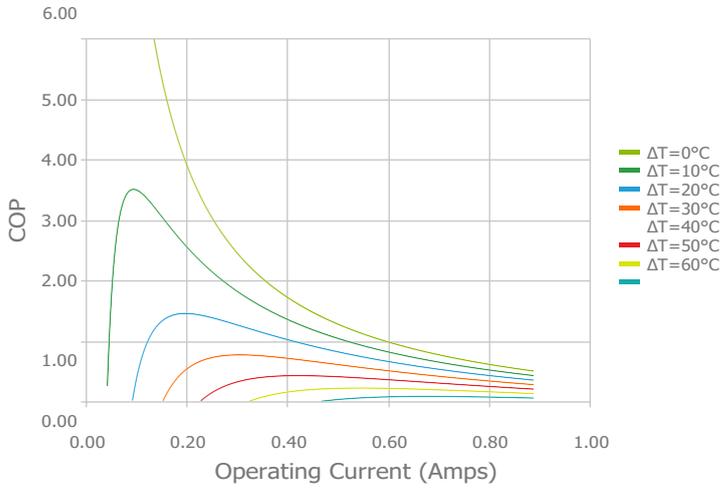
Heat Pumped at Cold Side
 Thot = 27 °C



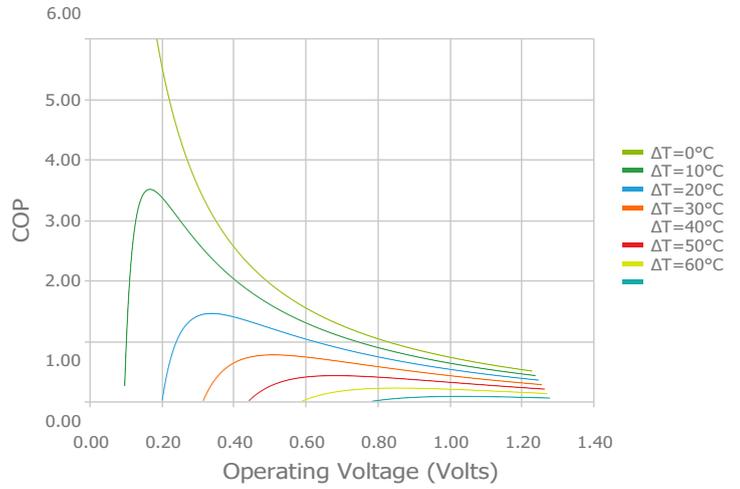
Current vs Voltage (I vs V)
 Thot = 27 °C



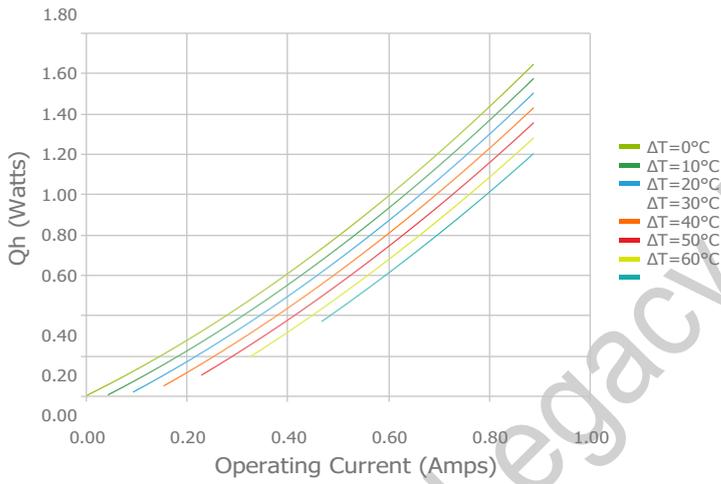
Coefficient of Performance (COP = Q_c/P_{in})
Thot = 27 °C



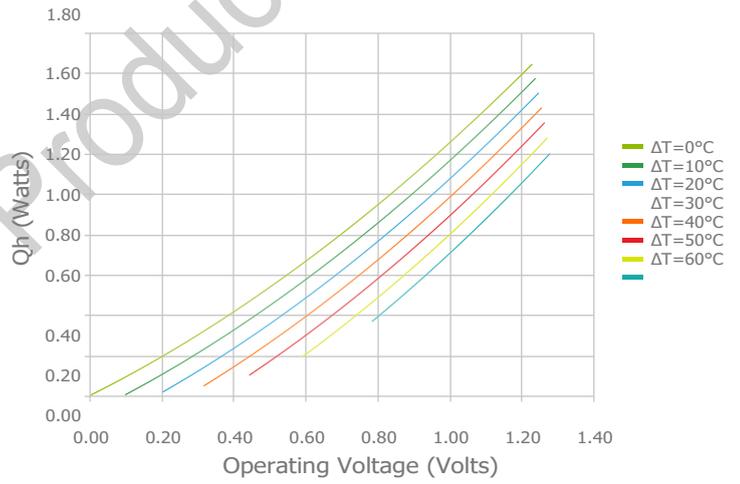
Coefficient of Performance (COP = Q_c/P_{in})
Thot = 27 °C



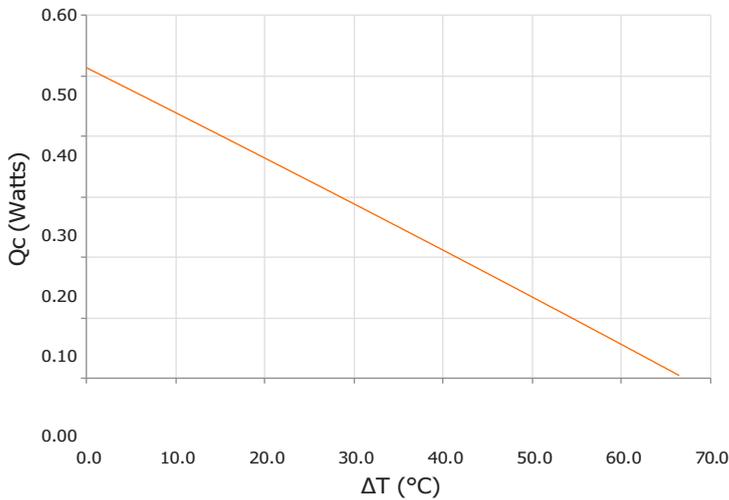
Total Heat Dissipated at Hot Side ($Q_h=Q_c+P_{in}$)
Thot = 27 °C



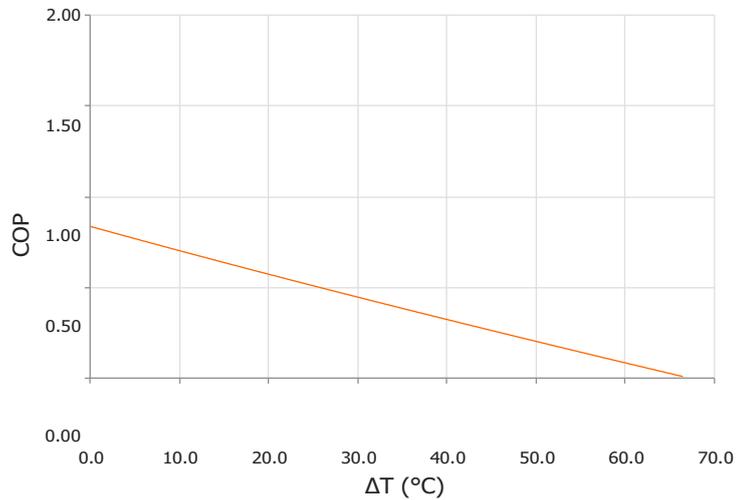
Total Heat Dissipated at Hot Side ($Q_h=Q_c+P_{in}$)
Thot = 27 °C



Heat Pumped at Cold Side (Q_c)
Thot = 27 °C | Current = 0.7 Amps



Coefficient of Performance (COP = Q_c/P_{in})
Thot = 27 °C | Current = 0.7 Amps



SPECIFICATIONS*

Hot Side Temperature	27.0 °C	35.0 °C	50.0 °C
Qcmax ($\Delta T = 0$)	0.5 Watts	0.6 Watts	0.6 Watts
ΔT_{max} ($Q_c = 0$)	68.0°C	70.9°C	76.0°C
I _{max} (I @ ΔT_{max})	0.8 Amps	0.8 Amps	0.8 Amps
V _{max} (V @ ΔT_{max})	1.2 Volts	1.2 Volts	1.3 Volts
Module Resistance	1.38 Ohms	1.44 Ohms	1.55 Ohms
Max Operating Temperature	80 °C		
Weight	1.0 gram(s)		

* Specifications reflect thermoelectric coefficients updated March 2020

FINISHING OPTIONS

Suffix	Thickness	Flatness / Parallelism	Hot Face	Cold Face	Lead Length
TB	2.438 ±0.013 mm 0.096 ± 0.001 in	0.013 mm / 0.013 mm 0.0005 in / 0.0005 in	Lapped	Lapped	50.8 mm 2.00 in

SEALING OPTIONS

Suffix	Sealant	Color	Temp Range	Description
	None			No sealing specified

NOTES

1. Max operating temperature: 80°C
2. Do not exceed I_{max} or V_{max} when operating module
3. Reference assembly guidelines for recommended installation
4. Solder tinning also available on metallized ceramics

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Date: 09/28/2020