Multistage MS Series MS2-010-06-06-11-11-00-W2
MFG Part Number: 9320003-304

Multistage MS Series Thermoelectric Cooler

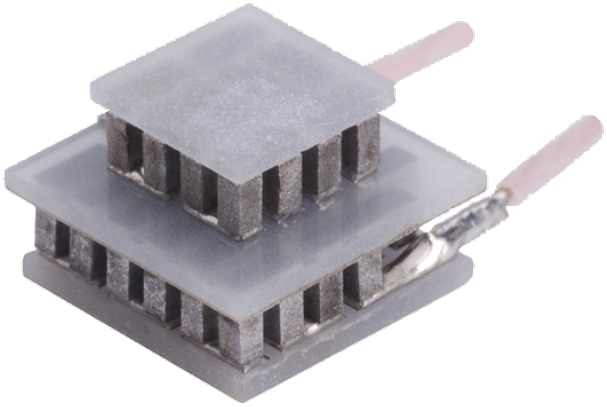
The MS2-010-06-06-11-11-00-W2 multistage thermoelectric cooler is able to reach colder temperatures than single stage thermoelectric coolers. It has a maximum Qc of 0.3 Watts when ΔT = 0 and a maximum ΔT of 94 °C at Qc = 0.

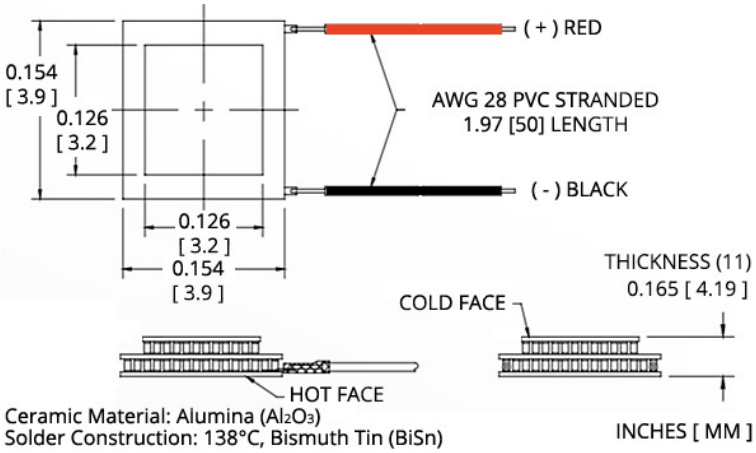
Features

- High temperature differential
- Precise temperature control
- Reliable solid-state operation
- Environmentally-friendly
- DC operation
- RoHS-compliant

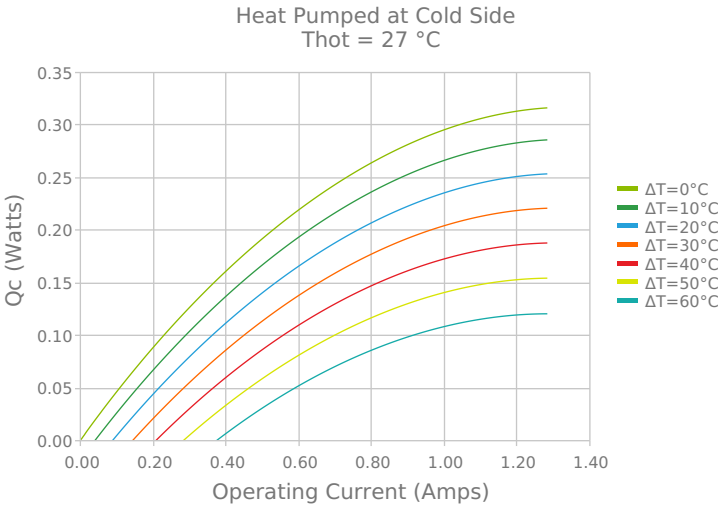
Applications

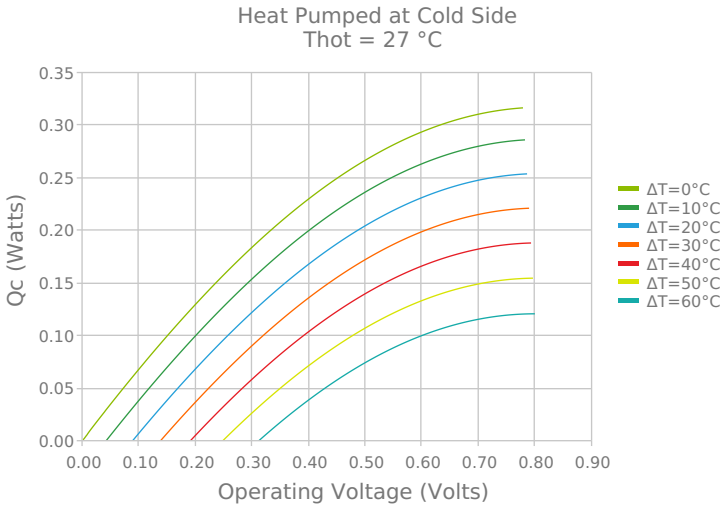
- Thermoelectric Cooling for CMOS Sensors
- Heads-Up Displays, Imaging Sensors

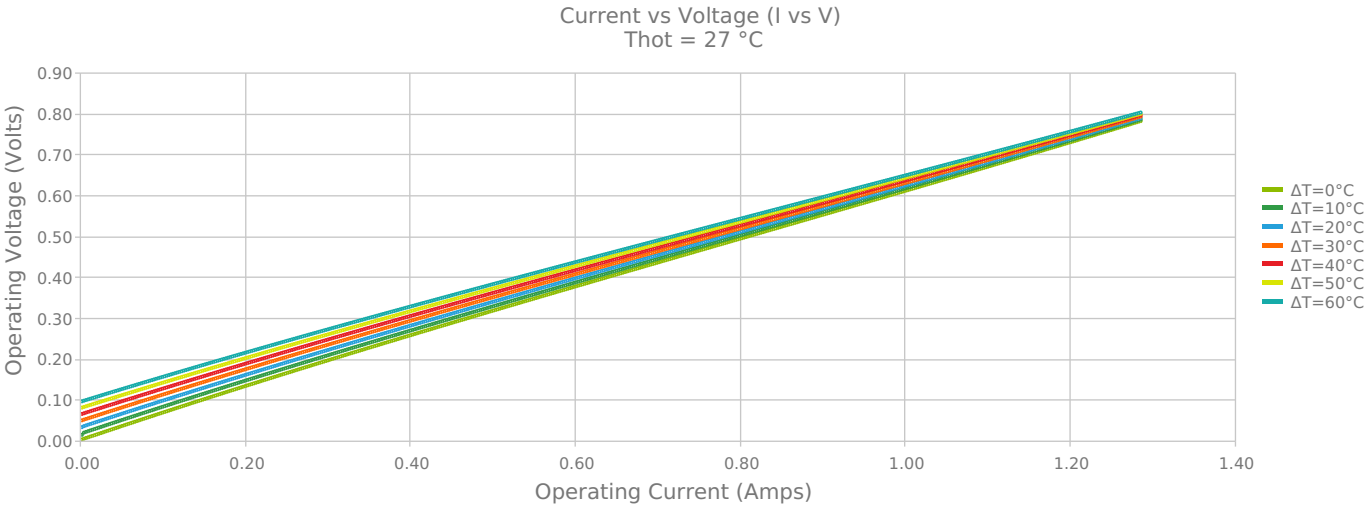




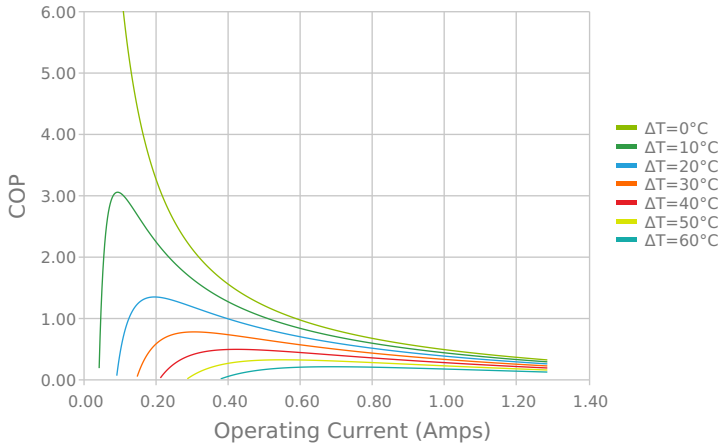
ELECTRICAL AND THERMAL PERFORMANCE







Coefficient of Performance (COP = Qc/Pin)
Thot = 27 °C



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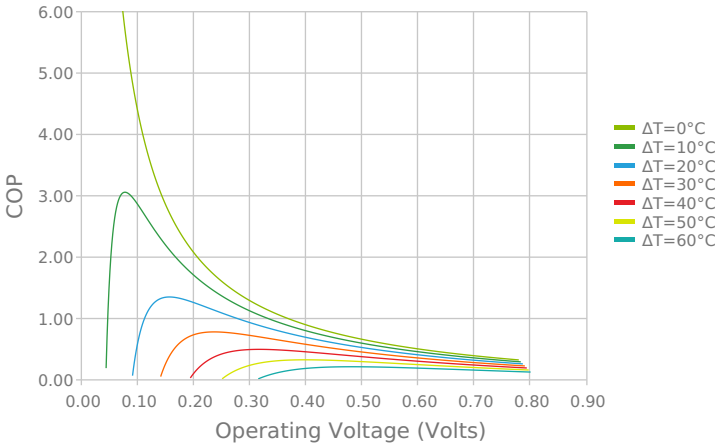
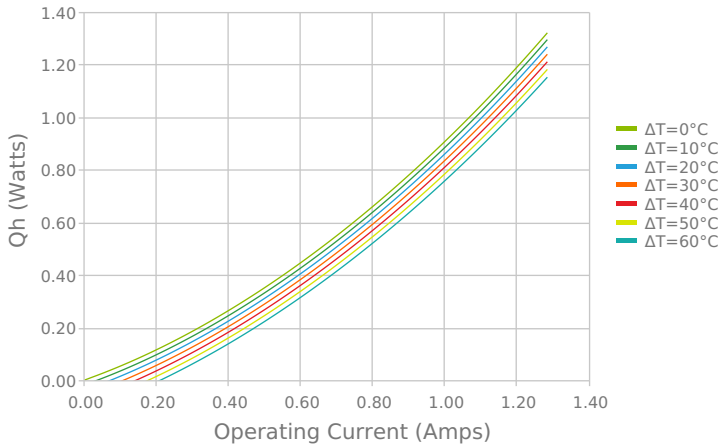


Total Heat Dissipated at Hot Side (Qh=Qc+Pin)
Thot = 27 °C



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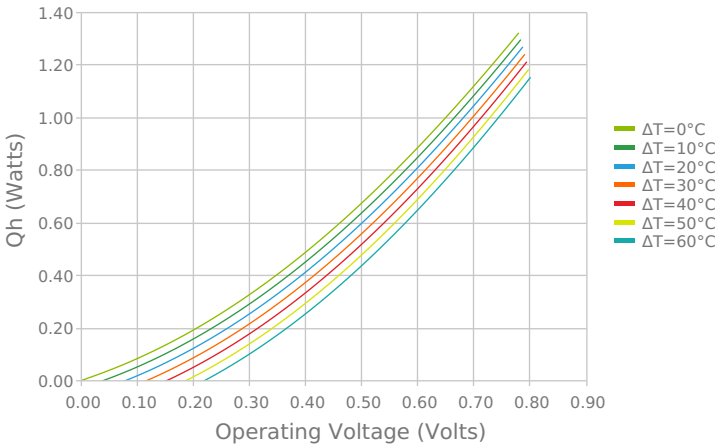
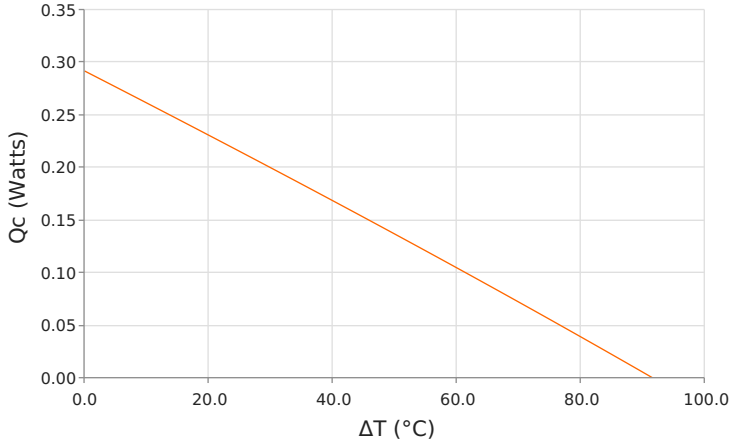
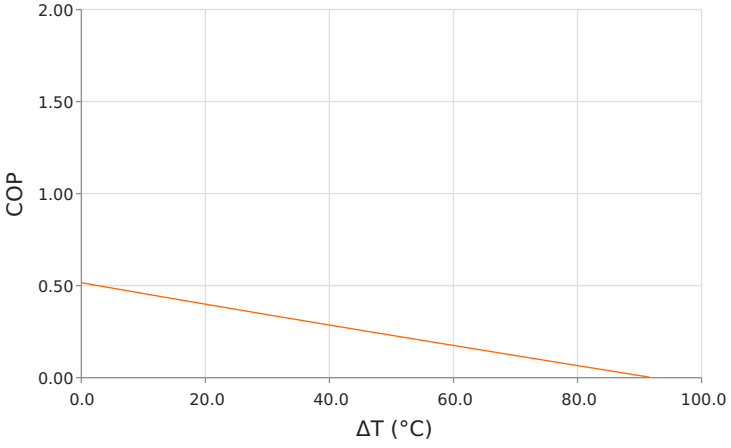


Heat Pumped at Cold Side (Qc)
Thot = 27 °C | Current = 1.0 Amps



Coefficient of Performance (COP = Qc/Pin)
Thot = 27 °C | Current = 1.0 Amps



SPECIFICATIONS*

Hot Side Temperature	**27.0 °C**
Qcmax (ΔT = 0)	0.3 Watts
ΔTmax (Qc = 0)	94.0 °C
Imax (I @ ΔTmax)	1.2 Amps
Vmax (V @ ΔTmax)	0.8 Volts
Module Resistance	0.63 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
00	3.403 ±0.203 mm 0.134 ± 0.008 in	0.025 mm / 0.203 mm 0.001 in / 0.008 in	Metallized	Metallized	50.0 mm 1.97 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. Solder tinning also available on metallized ceramics

Date: 06/01/2021