Multistage MS Series MS2-192-14-20-11-18-21-W8
MFG Part Number: 9350006-319

Multistage MS Series Thermoelectric Cooler

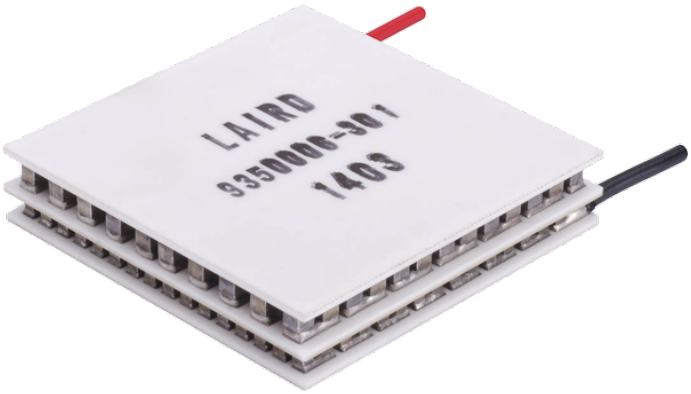
The MS2-192-14-20-11-18-21-W8 multistage thermoelectric cooler is able to reach colder temperatures than single stage thermoelectric coolers. It has a maximum Qc of 38 Watts when ΔT = 0 and a maximum ΔT of 90 °C at Qc = 0.

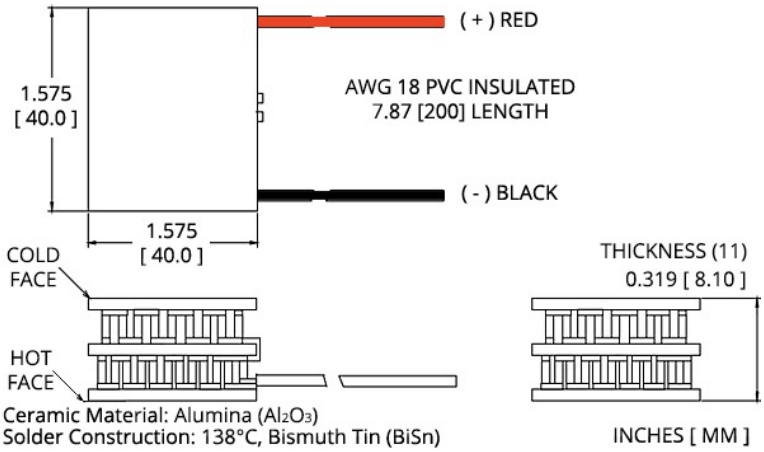
Features

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

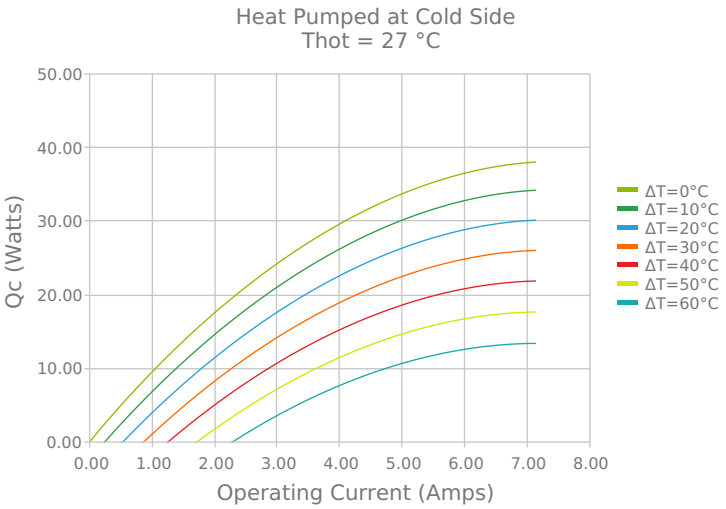
Applications

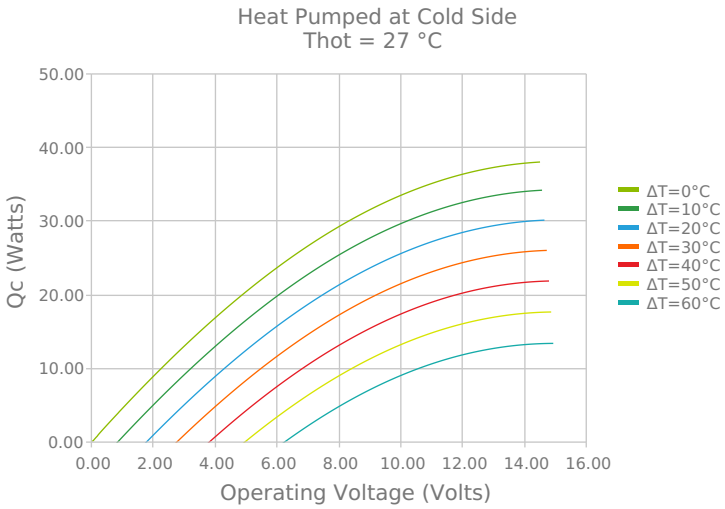
- Thermoelectric Cooling for CMOS Sensors
- Heads-Up Displays, Imaging Sensors

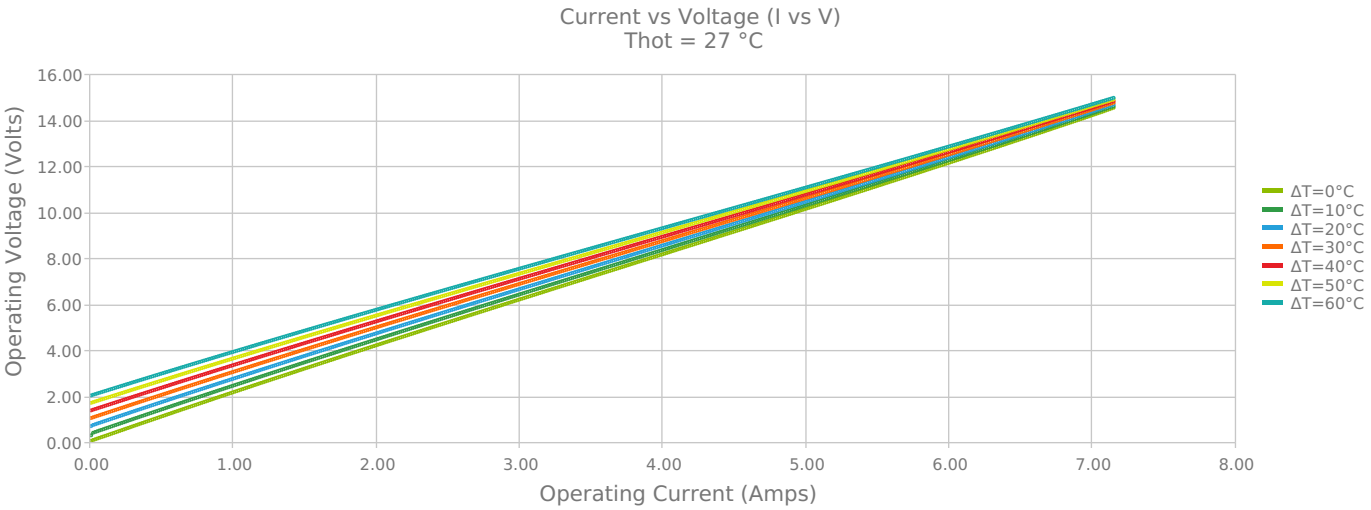




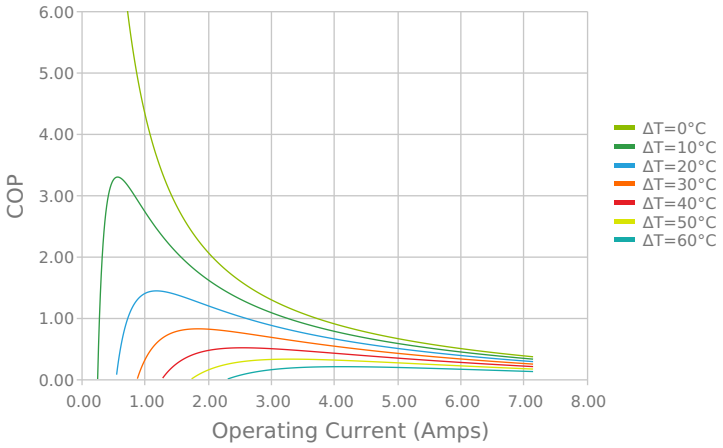
ELECTRICAL AND THERMAL PERFORMANCE







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



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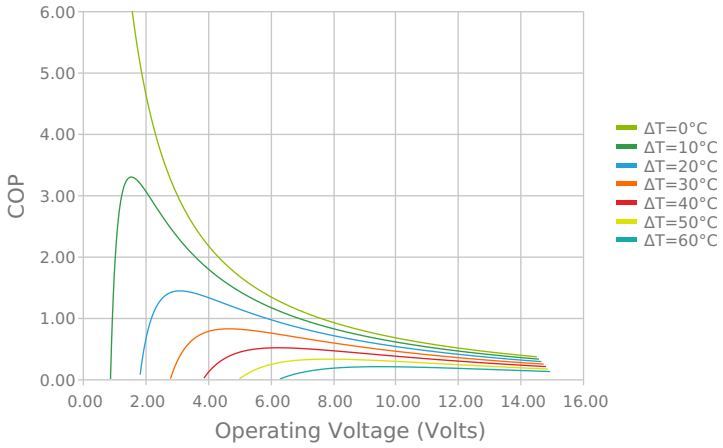
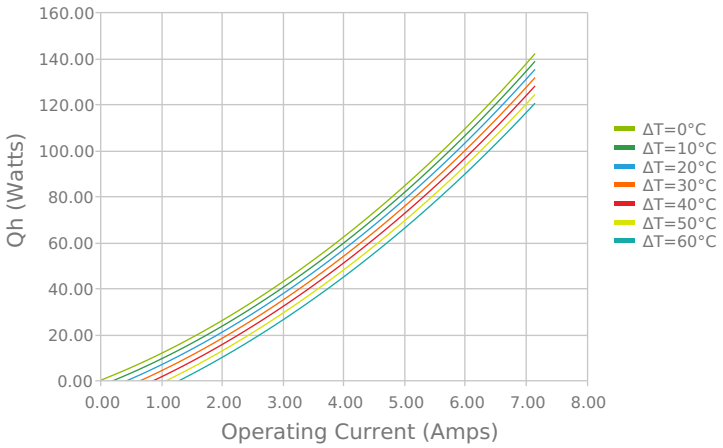
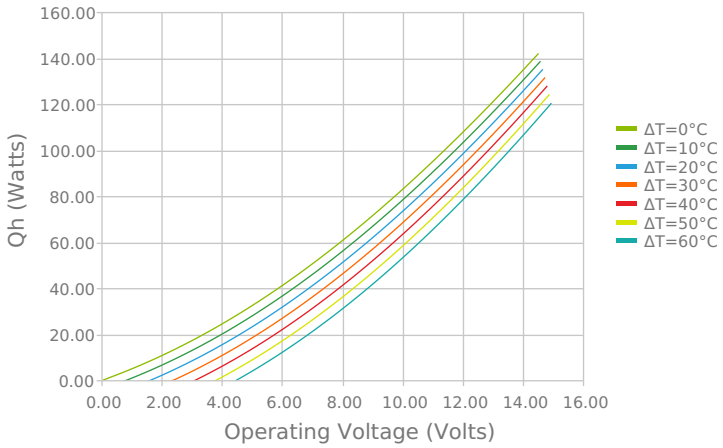


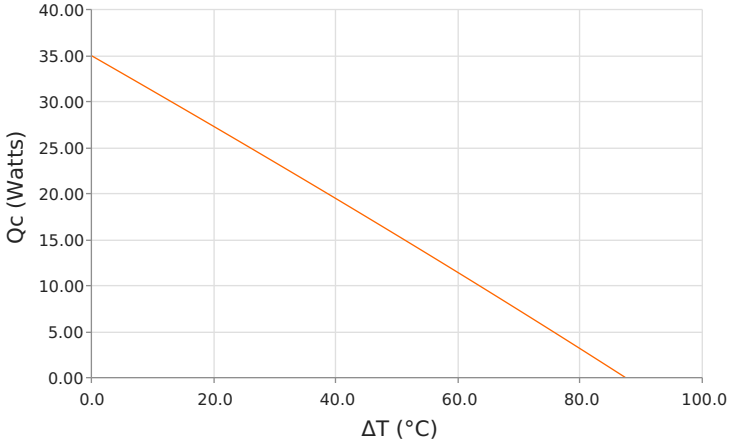
Total Heat Dissipated at Hot Side (Qh=Qc+Pin)
Thot = 27 °C



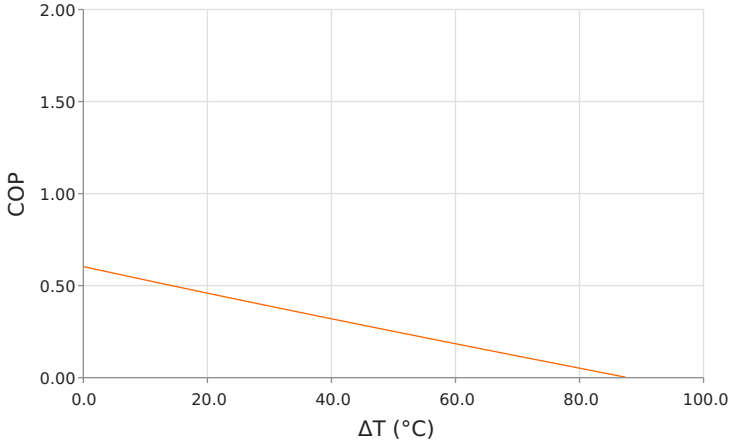
Total Heat Dissipated at Hot Side (Qh=Qc+Pin)
Thot = 27 °C



Heat Pumped at Cold Side (Qc)
Thot = 27 °C | Current = 5.4 Amps



Coefficient of Performance (COP = Qc/Pin)
Thot = 27 °C | Current = 5.4 Amps



SPECIFICATIONS*

Hot Side Temperature	**27.0 °C**
Qcmax (ΔT = 0)	38.0 Watts
ΔTmax (Qc = 0)	90.0 °C
Imax (I @ ΔTmax)	6.9 Amps
Vmax (V @ ΔTmax)	14.8 Volts
Module Resistance	2.14 Ohms
Max Operating Temperature	80 °C
Weight	60.0 gram(s)

* Specifications reflect thermoelectric coefficients updated March 2020

FINISHING OPTIONS

Suffix	Thickness	Flatness / Parallelism	Hot Face	Cold Face	Lead Length
00	40.203 ±0.203 mm 1.583 ± 0.008 in	0.025 mm / 0.203 mm 0.001 in / 0.008 in	Metallized	Metallized	199.9 mm 7.87 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: 12/14/2021