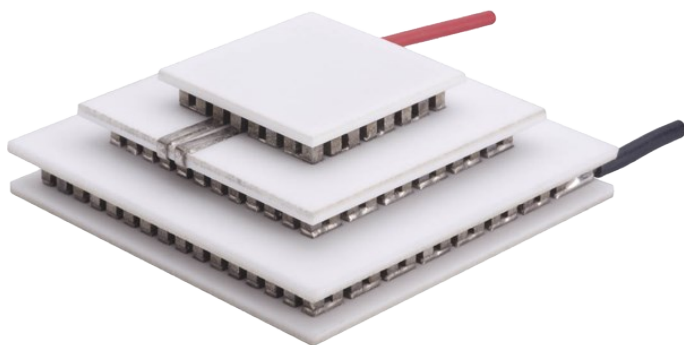


MS3-119-14-15-11-W8 Datasheet

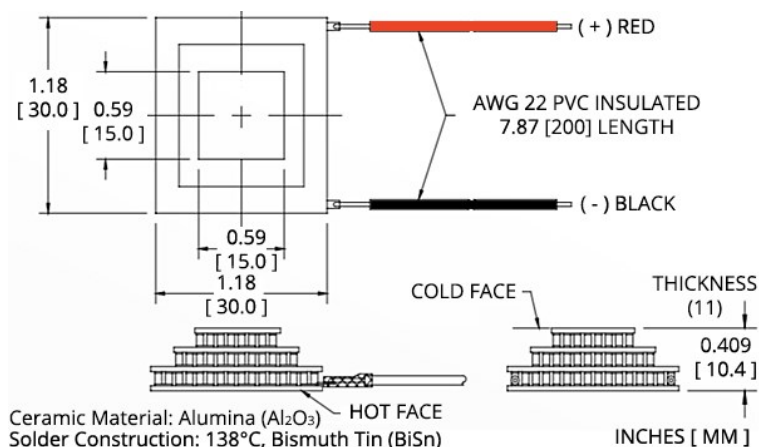
MFG Part Number 9350004-301

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The MS3-119-14-15-11-W8 multistage thermoelectric cooler is able to reach colder temperatures than single stage thermoelectric coolers. It has a maximum Q_c of 7.5 Watts when $\Delta T = 0$ and a maximum ΔT of 100 °C at $Q_c = 0$.



The MS3-119-14-15-11-W8 multistage thermoelectric cooler is able to reach colder temperatures than single stage thermoelectric coolers. It has a maximum



ELECTRICAL AND THERMAL PERFORMANCE

Selected Operating Point

Cooling Power (Q_c) = 2.98 Watts

Current = 2.97 Amps

Voltage = 6.46 Volts

Power Supply = 19.16 Watts

COP = 0.16

Power Dissipated (Q_h) = 22.15 Watts

θ_{hot} = 40 °C

Optimum COP

Cooling Power (Q_c) = 1.61 Watts

Current = 1.8 Amps

Voltage = 4.35 Volts

Power Supply = 7.82 Watts

COP = 0.21

Power Dissipated (Q_h) = 9.43 Watts

Maximum Q_c

Cooling Power (Q_c) = 3.46 Watts

Current = 4.14 Amps

Voltage = 8.56 Volts

Power Supply = 35.4 Watts

COP = 0.1

Power Dissipated (Q_h) = 38.86 Watts

Select Graph

Y - Axis

Q_c

COP

Q_h

Select Graph

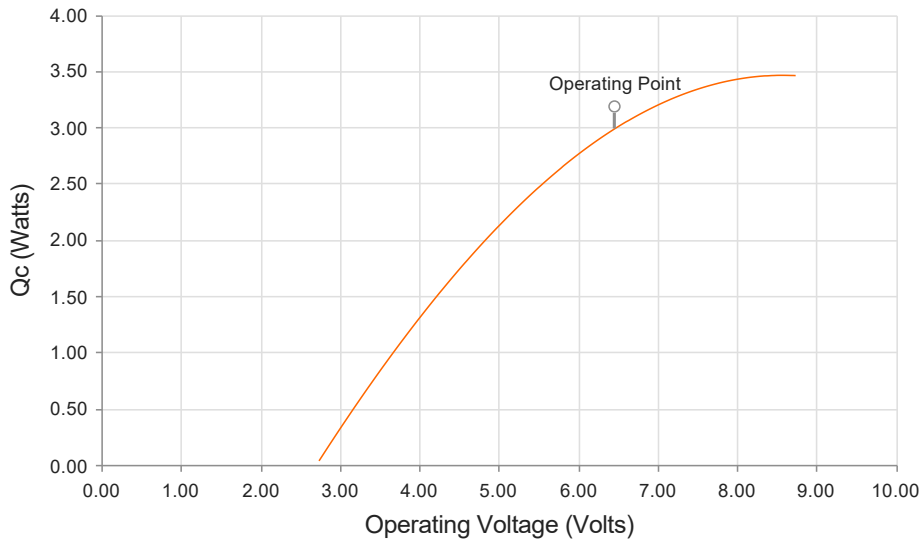
X - Axis

Voltage

Current

ΔT

Heat Pumped at Cold Side



Imin: 1.0 A **Imax: 4.1 A**
Vmin: 2.7 V **Vmax: 8.6 V**

Voltage Volts
 Current Amps

Control Temp °C
 Ambient Temp °C
 Δ T °C
 Hot Side Thermal Resistance °C/W
 Cold Side Thermal Resistance °C/W

[UPDATE](#) Click UPDATE to view changes in thermal operating conditions

SPECIFICATIONS

Qcmax (ΔT = 0)	7.5 Watts
ΔTmax (Qc = 0)	100.0 °C
Max Operating Temperature	80 °C
Weight	22.0 gram(s)

FINISHING OPTIONS

Suffix	Thickness	Flatness / Parallelism	Hot Face	Cold Face	Lead Length
11	15.000 ±0.203 mm 0.591 ± 0.008 in	0.025 mm / 0.203 mm 0.001 in / 0.008 in	Lapped	Lapped	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 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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