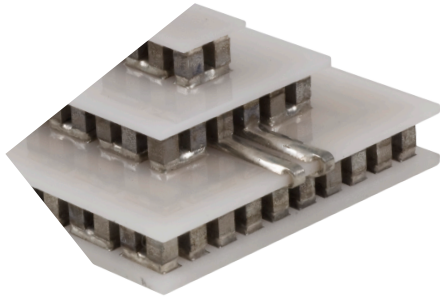


Multistage Series MS2,107,10,10,12,12 Thermoelectric Modules



The MS Series of thermoelectric modules (TEMs) are designed to reach cool down temperatures that are not achievable with single stage TEMs.

This product line is available in numerous heat pumping capacities, geometric shapes and temperature differentials. Assembled with Bismuth Telluride semiconductor material and thermally conductive Aluminum Oxide ceramics, the MS Series is designed for higher current and lower heat-pumping applications.

FEATURES

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

APPLICATIONS

- CCD cameras
- Electron microscope
- Calibration equipment
- Photonics laser systems
- Gas analyzers
- infrared (IR) Sensors
- Guidance Systems

PERFORMANCE SPECIFICATIONS

Hot Side Temperature (°C)	25
Qmax (Watts)	9.6
Delta Tmax (°C)	87
Imax (Amps)	2.9
Vmax (Volts)	9.1

SUFFIX	THICKNESS (PRIOR TO TINNING)	FLATNESS & PARALLELISM	HOT FACE	COLD FACE	LEAD LENGTH
00	0.258"±0.008"	0.001" / 0.004"	Metallized	Metallized	7.87"
11	0.246"± 0.008"	0.001" / 0.002"	Lapped	Lapped	7.87"
22	0.258"±0.008"	0.001" / 0.004"	Pre-tinned	Pre-tinned	7.87"

SEALING OPTION

SUFFIX	SEALANT	COLOR	TEMP RANGE	DESCRIPTION
RT	RTV	White	-60 to 204 °C	Non-corrosive, silicone adhesive sealant
EP	Epoxy	Black	-55 to 150 °C	Low density syntactic foam epoxy encapsulant

Americas: +1 888.246.9050

Europe: +46.31.420530

Asia: +86.755.2714.1166

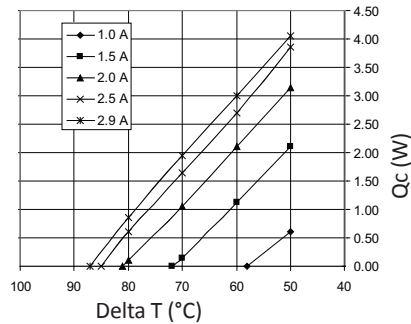
Thermal-AmericasSales@lairdtech.com

www.lairdtech.com

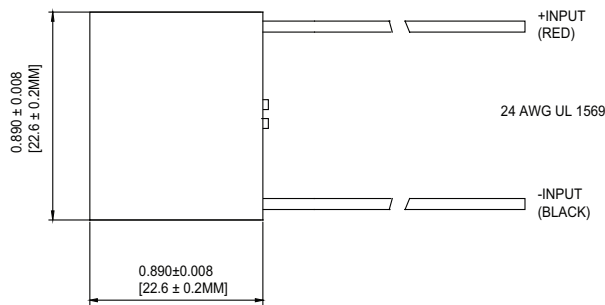
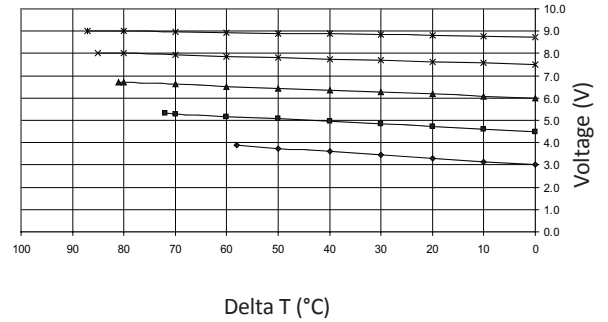
Multistage Series MS2,107,10,10,12,12 Thermoelectric Modules

Performance Curves at Th = 25°C

THERMO

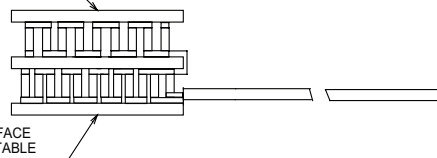


ELECTRIC



COLD FACE
SEE TABLE

HOT FACE
SEE TABLE



Ceramic Material: 96% and 100% Alumina Ceramics
Solder Construction: 138°C, Bismuth Tin (BiSn)

OPERATING TIPS

- Max Operating Temperature: 80°C
- Do not exceed I_{max} or V_{max} when operating module
- Reference assembly guidelines for recommended installation
- Solder tinning also available on metallized ceramics

THR-DS-MS2,107,10,10,12,12 070215

Any information furnished by Laird and its agents is believed to be accurate and reliable. All specifications are subject to change without notice. Responsibility for the use and application of Laird materials rests with the end user, since Laird and its agents cannot be aware of all potential uses. Laird makes no warranties as to the fitness, merchantability or suitability of any Laird materials or products for any specific or general uses. Laird, Laird Technologies, Inc or any of its affiliates or agents shall not be liable for incidental or consequential damages of any kind. All Laird products are sold pursuant to the Laird Technologies' Terms and Conditions of sale in effect from time to time, a copy of which will be furnished upon request. © Copyright 2015 Laird Technologies, Inc. All Rights Reserved. Laird, Laird Technologies, the Laird Logo, and other marks are trademarks or registered trademarks of Laird Technologies, Inc. or an affiliate company thereof. Other product or service names may be the property of third parties. Nothing herein provides a license under any Laird or any third party intellectual property rights.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Thermoelectric Modules](#) category:

Click to view products by [Laird Connectivity](#) manufacturer:

Other Similar products are found below :

[C3100-1980](#) [C3200-0504](#) [C3200-0505](#) [C3200-371](#) [C3400-0262](#) [430084-505](#) [430848-514](#) [44710-500](#) [430141-508](#) [430005-517](#) [CP85438](#)
[66101-500](#) [CP40136](#) [CP60133](#) [CP60140](#) [CP30238](#) [CP20251](#) [CP85338](#) [CP20151](#) [430082-502](#) [430078-525](#) [CP14,31,10,L1,W4.5](#)
[HT4,12,F2,4040,TA,W6](#) [MS3,119,14,15,11,W8](#) [MS5,257,10,15,11,W8](#) [MS2,107,10,10,12,12,11,W8](#) [ZT5,16,F1,4040,TA,W8](#) [58910-501](#)
[UT15,200,F2,4040,TA,W6](#) [UT8,288,F2,5252,TA,W6](#) [UT8,200,F2,4040,TA,W6](#) [CP12,161,04,L1,W4.5](#) [430719-502](#)
[ET20,31,F1A,0909,11,W2.25](#) [ET19,23,F1N,0608,11,W2.25](#) [430362-502](#) [HT8,12,F2,4040,TA,W6](#) [430138-506](#) [430078-501](#)
[PT6,12,F2,4040,TA,W6](#) [430032-502](#) [OT12,66,F0,1211,11,W2.25](#) [OT12,12,F0,0406,11,W2.25](#) [MS2,010,06,06,11,11, 11,W2,ET](#) [CP20247H](#)
[CP85301535](#) [CP35447](#) [CP60131H](#) [CPM-2F](#) [CP853345H](#)