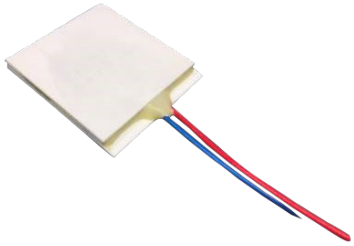
Laird THERMAL SYSTEMS

Power-Cycling Series
PC24-128-F2-5555-TA-W6
Thermoelectric Modules



The PowerCycling Series is a thermoelectric module (TEM) designed for thermal cycling between multiple temperature set points and is ideal for applications in healthcare [and others] where fast temperature changes are required. The module is specially constructed to reduce the amount of stress induced on the TE elements during operation. This product line has been tested to withstand 500K cycles without degradation in performance. The TEMs are assembled using Bismuth Telluride semiconductor material and thermally conductive Aluminum Oxide ceramics.

FEATURES

- High thermal cycling capability
- Precise temperature control
- Reliable solid-state operation
- No sound or vibration
- RoHS Compliant

APPLICATIONS

- Molecular Diagnostics
- Clinical Diagnostics
- Analytical Instrumentation
- Electronic Enclosure Cooling
- Chillers (Liquid Cooling)

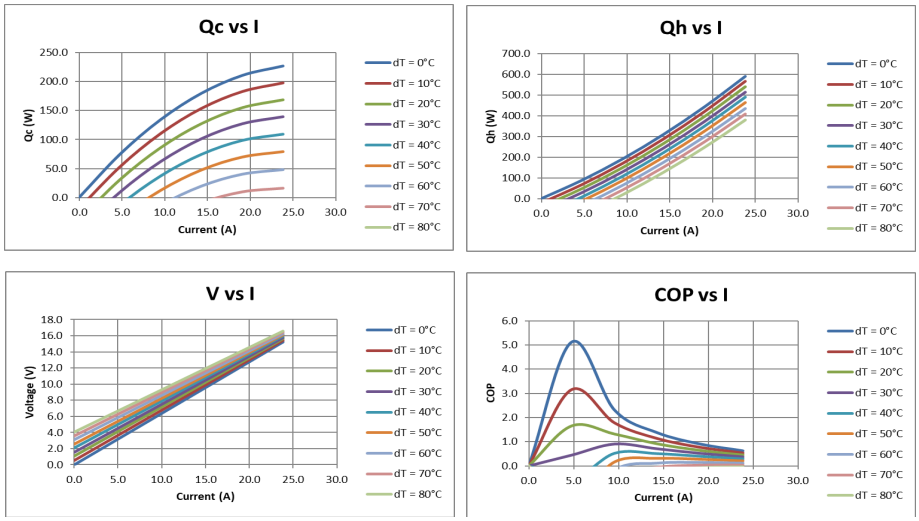
TECHNICAL SPECIFICATIONS		
Hot Side Temperature (°C)	25	50
Qmax (Watts)	206	226
Delta Tmax (°C)	67	76
Imax (Amps)	23.8	23.8
Vmax (Volts)	14.6	16.4
Module Resistance (Ohms)	0.56	0.64

SUFFIX	THICKNESS (PRIOR TO TINNING)	FLATNESS & PARALLELISM	HOT FACE	COLD FACE	LEAD LENGTH
TA	0.157”± 0.0008”	0.0008”/0.0016”	Lapped	Lapped	6.0”

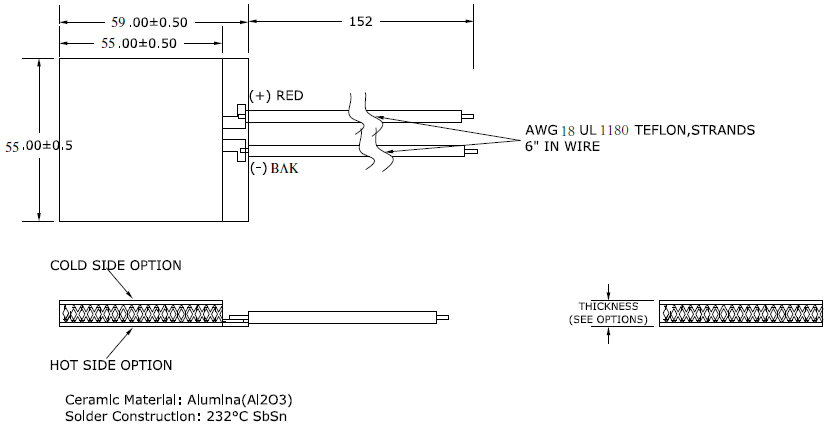
SEALING OPTIONS

SUFFIX	SEALANT	COLOR	TEMP RANGE	DESCRIPTION
RT	RTV	Clear	-60 to 204 °C	Non-corrosive, silicone adhesive

PERFORMANCE CURVES AT TH = 50°C



MECHANICAL DRAWING



NOTES

1. Max Operating Temperature: 120°C
2. Do not exceed Imax or Vmax when operating module
3. Reference assembly guidelines for recommended installation

RoHS