

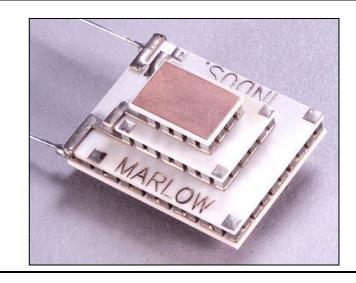
marlow industries inc.®

Thermoelectric Cooler

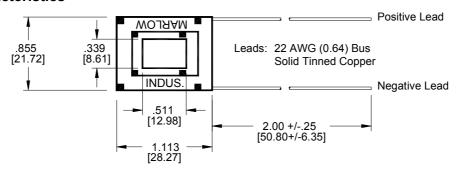
MI3040

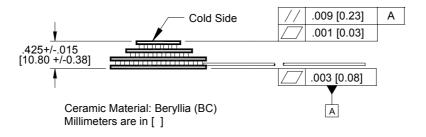
Performance Values

Hot Side Temperature (°C)	27°C	50°C
Δ Tmax (°C-dry N ₂):	98	111
Qmax (watts):	5.6	6.25
Imax (amps):	4.5	4.5
Vmax (vdc):	7.3	8.2
AC Resistance (ohms):	1.54	



Mechanical Characteristics





Ordering Options

MI3040-01	both surfaces are metallized
MI3040-02	hot side exterior is metallized
MI3040-03	no metallization

- For example, and MI3040 with only the hot side metallized is specified as an MI3040-02BC
- Pretinned metallized ceramic surface(s) with 117°C solder.
- Thermistor mounted on edge of cold side ceramic. (Calibration available.)
- Elevated temperature burn-in with test data provided.

Performance Curves

Environment: One atmosphere dry nitrogen

Hot Side Temperature: 27°C

HEAT LOAD (WATTS) 120.0 100.0 0.00 1.00 80.0 0 2.00 60.0 3.00 4.00 20.0 5.00 0.0 8.0 VOLTAGE (VDC) 6.0 4.0 2.0 Q=0△ T=0

HEAT LOAD (WATTS) 120.0 0.00 100.0 1.00 80.0 2.00 0 3.00 60.0 4.00 5.00 20.0 6.00 0.0 8.0 VOLTAGE (VDC) 6.0 4.0 Q=02.0 △ T=0 0.0 3.0 0.0 1.0 2.0 4.0 5.0 **CURRENT (AMPS)**

Hot Side Temperature: 50°C

For performance information in a vacuum or with hot side temperatures other than 27°C or 50°C, consult one of our Applications Engineers.

Installation

Recommended mounting methods: Bonding with thermal epoxy or soldering with metallized ceramics. For additional information, please refer to our TEC Installation Guide.

Operation Cautions

For maximum reliability, storage and operation below 85°C in a non-condensing environment is recommended. To minimize thermal stress, use linear/proportional temperature control or a similar method rather than an ON/OFF method.



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0.0

1.0

2.0

CURRENT (AMPS)

3.0

4.0

5.0

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