

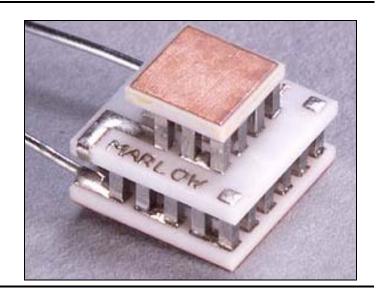
marlow industries inc.®

Thermoelectric Cooler

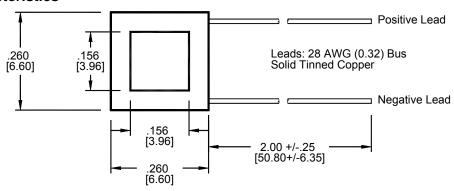
MI2021T

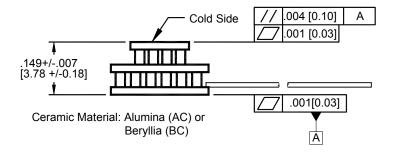
Performance Values

| Hot Side Temperature (°C) | 27°C | 50°C |
|----------------------------------|------|------|
| Δ Tmax (°C-dry N ₂): | 83 | 94 |
| Qmax (watts): | 0.92 | 1.02 |
| Imax (amps): | 1.4 | 1.3 |
| Vmax (vdc): | 2.0 | 2.1 |
| AC Resistance (ohms): | 1.32 | |



Mechanical Characteristics





Ordering Options

| MI2021T-01 | both surfaces are metallized |
|------------|---------------------------------|
| MI2021T-02 | hot side exterior is metallized |
| MI2021T-03 | no metallization |

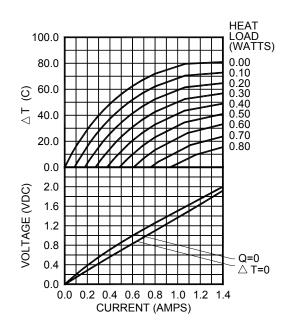
- For example, and MI2021T with only the hot side metallized is specified as an MI2021T-02AC
- Pretinned metallized ceramic surface(s) with 117°C solder.
- Thermistor mounted on edge of cold side ceramic. (Calibration available.)
- Elevated temperature burn-in with test data provided.
- A maximum of 10 coolers are packaged per box.

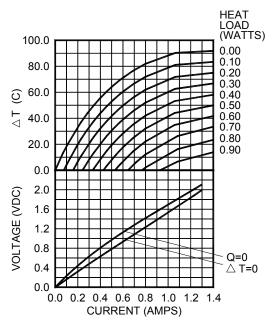
Performance Curves

Environment: One atmosphere dry nitrogen

Hot Side Temperature: 27°C

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.



Marlow Industries, Inc. 10451 Vista Park Road Dallas Texas 75238-1645 TEL: 214-340-4900

FAX: 214-341-5212 Internet: http://www.marlow.com Marlow Industries Europe

Aberdeen House, South Road Haywards Heath West Sussex RH164NG UK

TEL: +44 (0)1444-443404 FAX: +44 (0)1444-443334 **Marlow Industries Asia**

1-1-8-401 Uehara, Shibuya-ku Tokyo, Japan 151-0064 TEL: +81 (3) 5454-5280

FAX: +81 (3) 5454-5281