

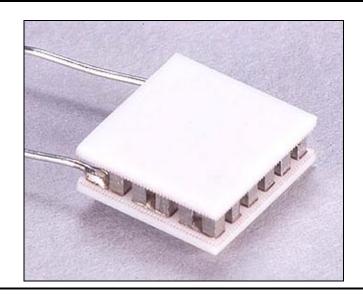
# marlow industries inc.®

### **Thermoelectric Cooler**

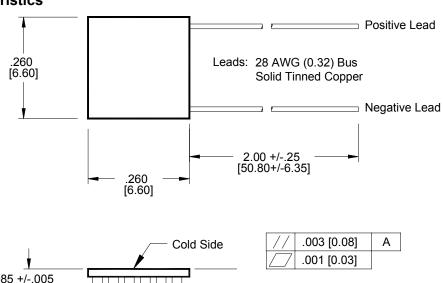
### MI1021T

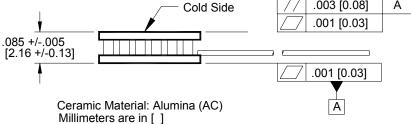
### **Performance Values**

Hot Side Temperature (°C)	27°C	50°C
Δ Tmax (°C-dry N <sub>2</sub> ):	64	72
Qmax (watts):	2.2	2.5
Imax (amps):	1.8	1.8
Vmax (vdc):	1.9	2.2
AC Resistance (ohms):	0.92	



#### **Mechanical Characteristics**





## **Ordering Options**

MI1021T-01	both surfaces are metallized
MI1021T-02	hot side exterior is metallized
MI1021T-03	no metallization

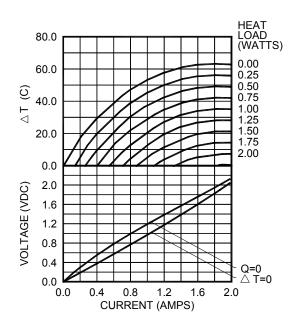
- For example, and MI1021T with only the hot side metallized is specified as an MI1021T-02AC
- Pretinned metallized ceramic surface(s) with 117°C solder.
- Thermistor mounted on edge of cold side ceramic. (Calibration available.)
- Elevated temperature burn-in with test data provided.

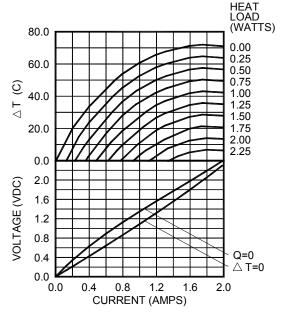
### **Performance Curves**

#### **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.



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