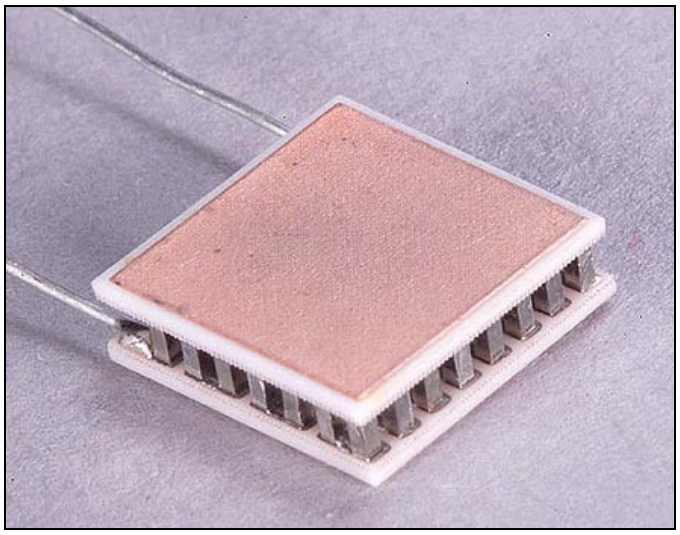
marlow industries inc.®

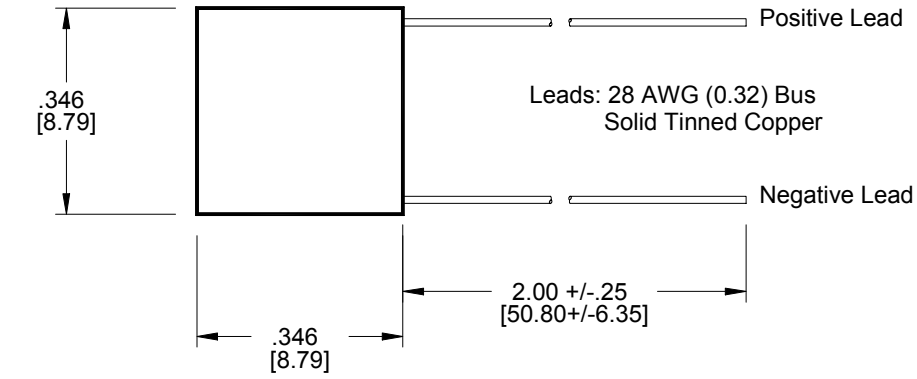
Thermoelectric Cooler MI1012T

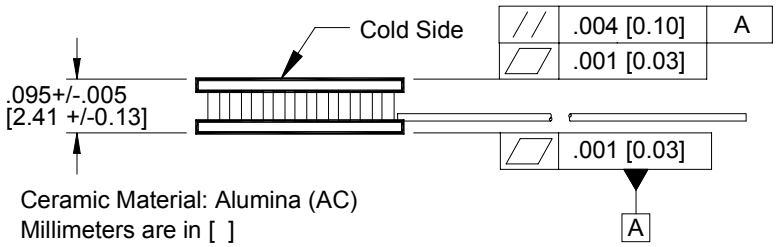
Performance Values

Hot Side Temperature (°C)	27°C	50°C
Δ Tmax (°C-dry N_2):	61	68
Qmax (watts):	2.1	2.4
Imax (amps):	1.0	1.0
Vmax (vdc):	3.7	4.2
AC Resistance (ohms):	3.24	---



Mechanical Characteristics





Ordering Options

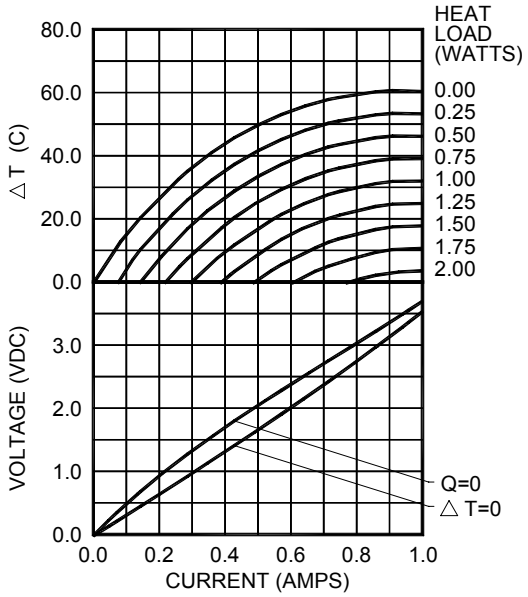
MI1012T-01	both surfaces are metallized
MI1012T-02	hot side exterior is metallized
MI1012T-03	no metallization

- For example, and MI1012T with only the hot side metallized is specified as an MI1012T-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.

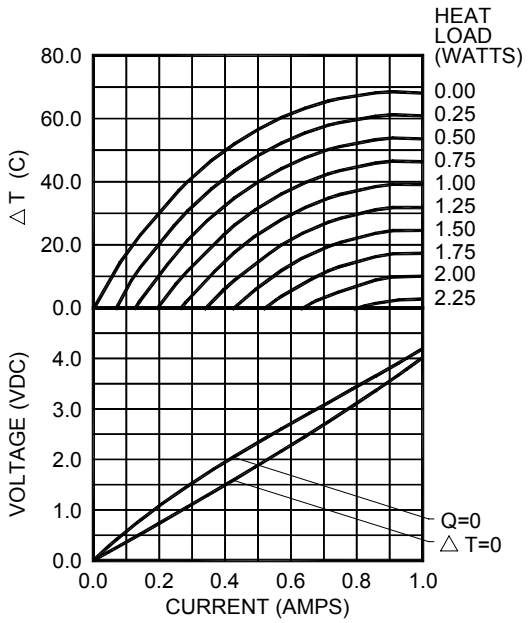
Performance Curves

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.

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