

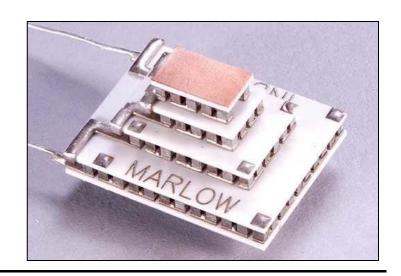
marlow industries inc.®

Thermoelectric Cooler

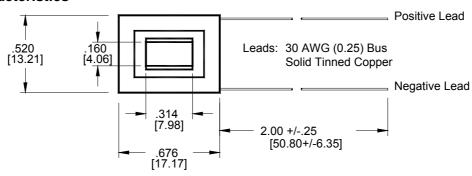
MI4012T

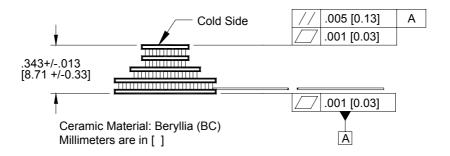
Performance Values

Hot Side Temperature (°C)	27°C	50°C
Δ Tmax (Vacuum):	114	129
Qmax (watts):	0.76	0.86
Imax (amps):	1.0	1.0
Vmax (vdc):	6.7	7.4
AC Resistance (ohms):	6.22	



Mechanical Characteristics





Ordering Options

MI4012T-01	both surfaces are metallized – cooler is mounted and shipped on test base		
MI4012T-02	hot side exterior is metallized – cooler is mounted and shipped on test base		
MI4012T-03	no exterior metallization		

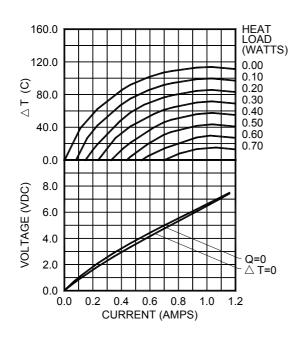
- For example, and MI4012T with only the hot side metallized is specified as an MI4012T-02BC
- Pretinned metallized ceramic surface(s) with 117°C solder.
- Thermistor mounted on edge of cold side ceramic. (Calibration available.)
- Elevated temperature burn-in with test data provided.

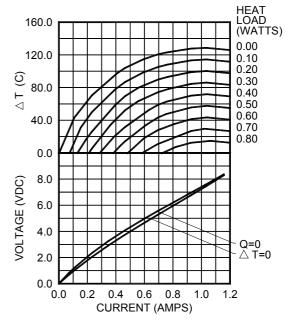
Performance Curves

Environment: Vacuum

Hot Side Temperature: 27°C

Hot Side Temperature: 50°C





For performance information 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

TEL: +81 (3) 5454-5280 FAX: +81 (3) 5454-5281