

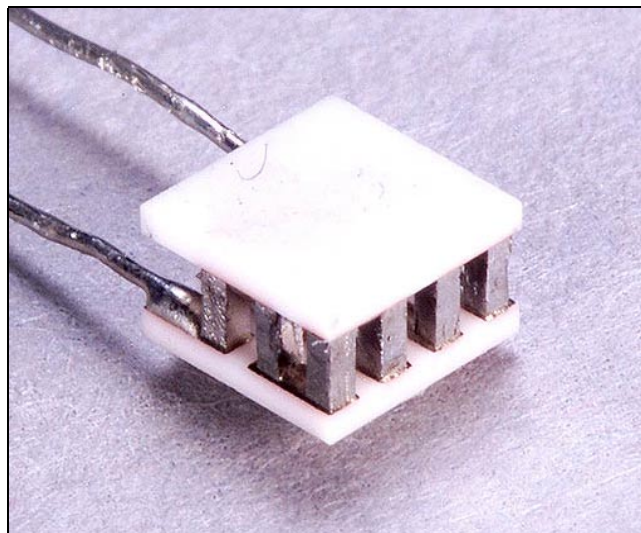


Thermoelectric Cooler

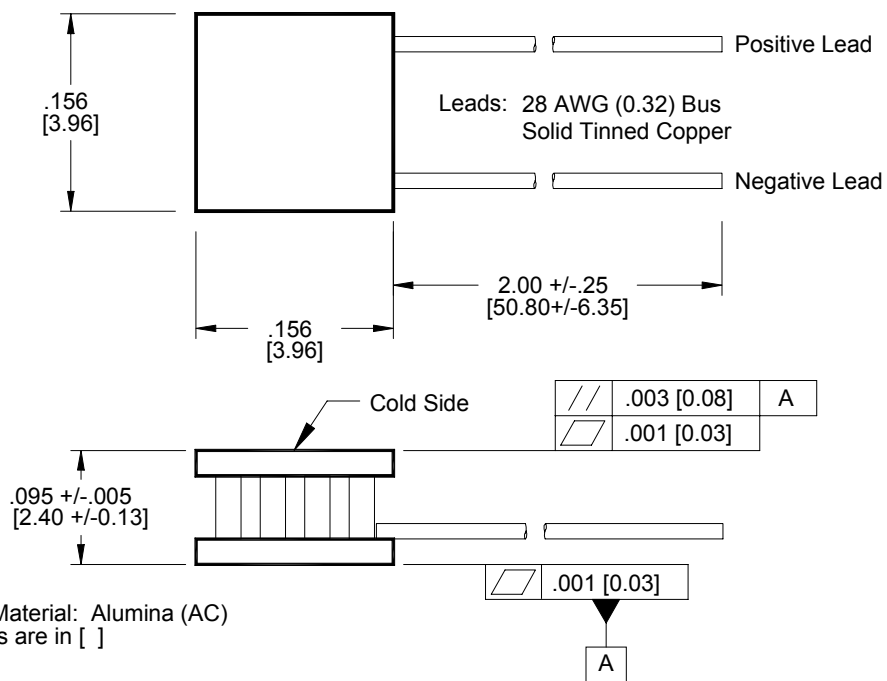
MI1010T

Performance Values

Hot Side Temperature (°C)	27°C	50°C
Δ Tmax (°C-dry N ₂):	61	67
Qmax (watts):	0.47	0.53
I _{max} (amps):	1.0	1.0
V _{max} (vdc):	0.8	1.0
AC Resistance (ohms):	0.75	---



Mechanical Characteristics



Ordering Options

MI1010T-01	both surfaces are metallized
MI1010T-02	hot side exterior is metallized
MI1010T-03	no metallization

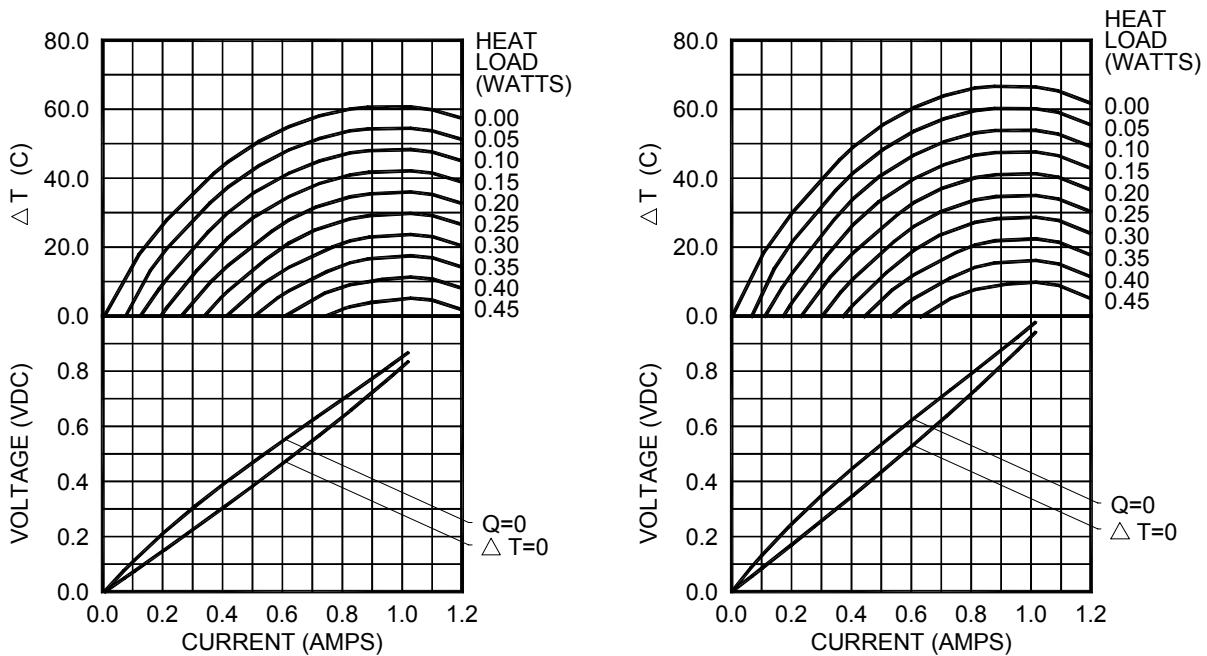
- For example, and MI1010T with only the hot side metallized is specified as an MI1010T-02AC
- Pretinned metallized ceramic surface(s) with 117°C solder.
- Thermistor mounted on edge of cold side ceramic. (Calibration available.)
- Elevated temperature burn-in with test data provided.

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