

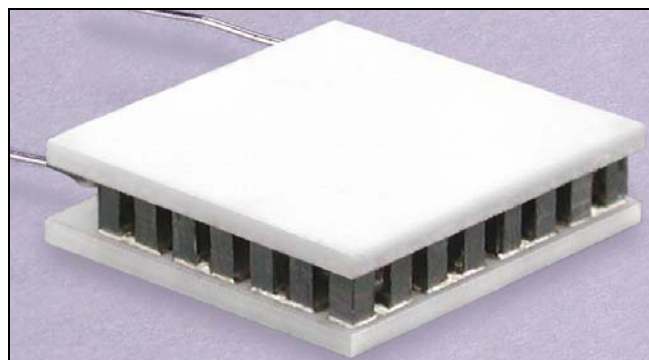


## Thermoelectric Cooler NL1022T

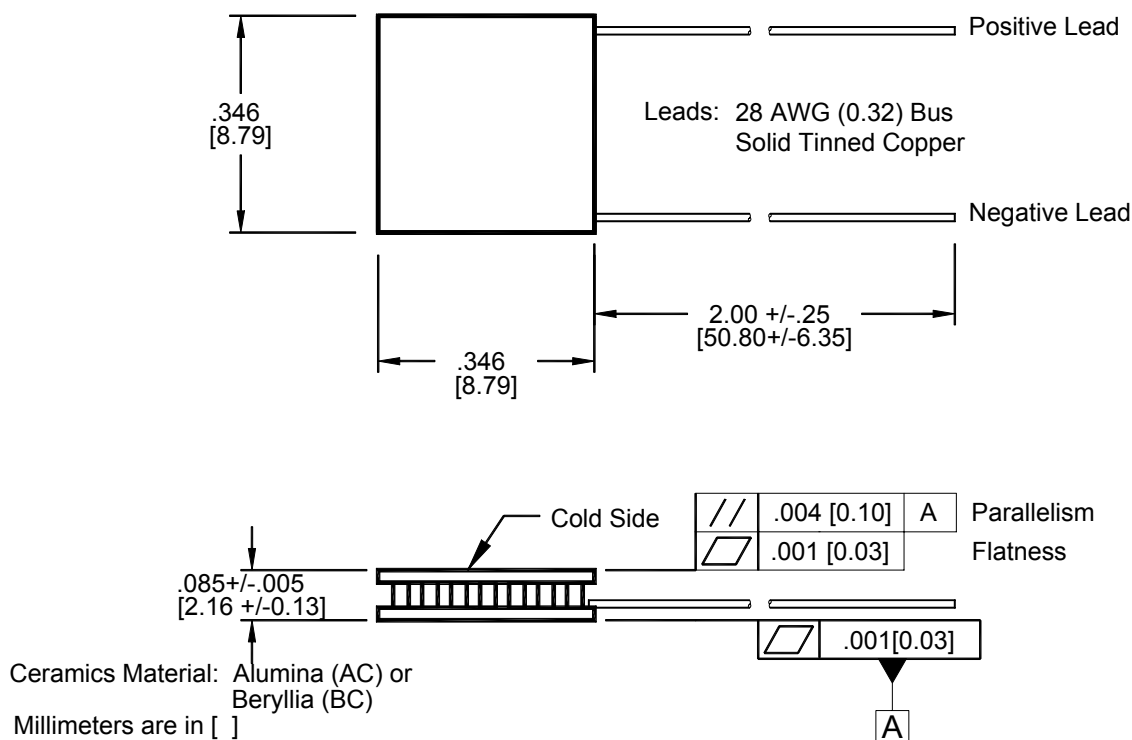
RoHS 2002/95/EC Compliant

### Performance Values

| Hot Side Temperature (°C)                  | 27°C | 50°C |
|--------------------------------------------|------|------|
| $\Delta T_{max}$ (°C-dry N <sub>2</sub> ): | 64   | 73   |
| Q <sub>max</sub> (watts):                  | 4.0  | 4.6  |
| I <sub>max</sub> (amps):                   | 1.8  | 1.8  |
| V <sub>max</sub> (vdc):                    | 3.5  | 4.0  |
| AC Resistance (ohms):                      | 1.70 | ---  |



### Mechanical Characteristics



### Ordering Options

| Model Number | Description                     |
|--------------|---------------------------------|
| NL1022T-01   | both surfaces are metallized    |
| NL1022T-02   | hot side exterior is metallized |
| NL1022T-03   | no metallization                |

### Features

- RoHS 2002/95/EC compliant
- For example, and NL1022T with only the hot side metallized is specified as an NL1022T-02AC

### Available Modifications

- 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.

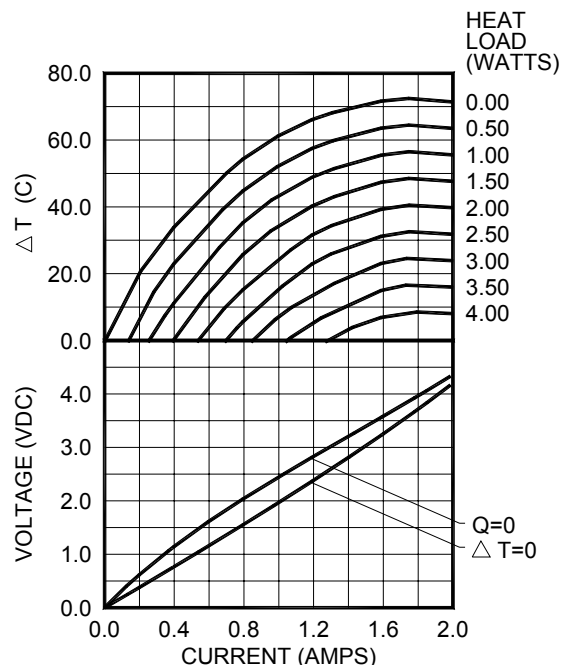
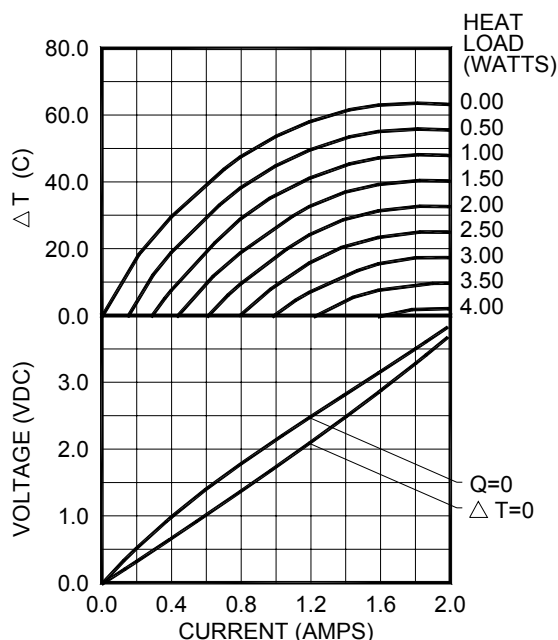


## Performance Curves

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.

## Addresses

**Marlow Industries, Inc.**  
10451 Vista Park Road  
Dallas Texas 75238-1645  
214-340-4900 (tel)  
214-341-5212 (fax)

**Marlow Industries Europe**  
Aberdeen House, South Road  
Haywards Heath  
West Sussex RH164NG UK  
+44 (0)1444-443404 (tel)  
+44 (0)1444-443334 (fax)

**II-VI Japan Inc.**  
WBG Marive East 17F  
2-6 Nakase, Mihama-ku  
Chiba-Shi, Chiba 261-7117  
Japan  
81 43 297 2693 (tel)  
81 43 297 3003 (fax)  
center@ii-vi.co.jp  
www.ii-vi.co.jp

**II-VI Singapore Pte., Ltd.**  
Blk. 5012, Techplace II  
#04-07 & 05-07/12, Ang Mo Kio Ave. 5  
Singapore 569876  
(65) 6481 8215 (tel)  
(65) 6481 8702 (fax)  
info@ii-vi.com.sg  
www.ii-vi.com.sg

**Marlow Industries China, II-VI Technologies Beijing**  
A subsidiary of II-VI Incorporated  
Rm 202, 1# Lize 2nd Middle Road  
Wangjing, Chaoyang District  
Beijing 100102 China  
64391260 ext 105 (tel)  
64399315 (fax)  
info@iivibj.com