



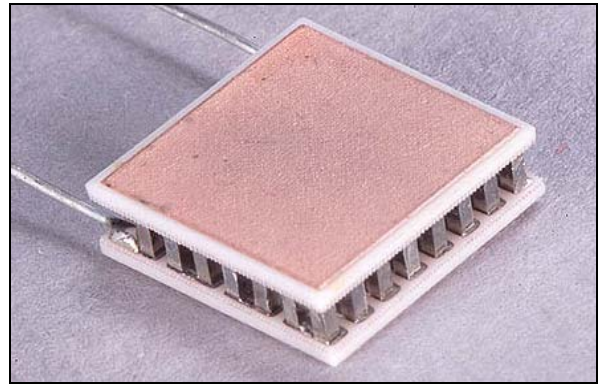
**RoHS 2002/95/EC Compliant**

TECHNICAL DATA SHEET

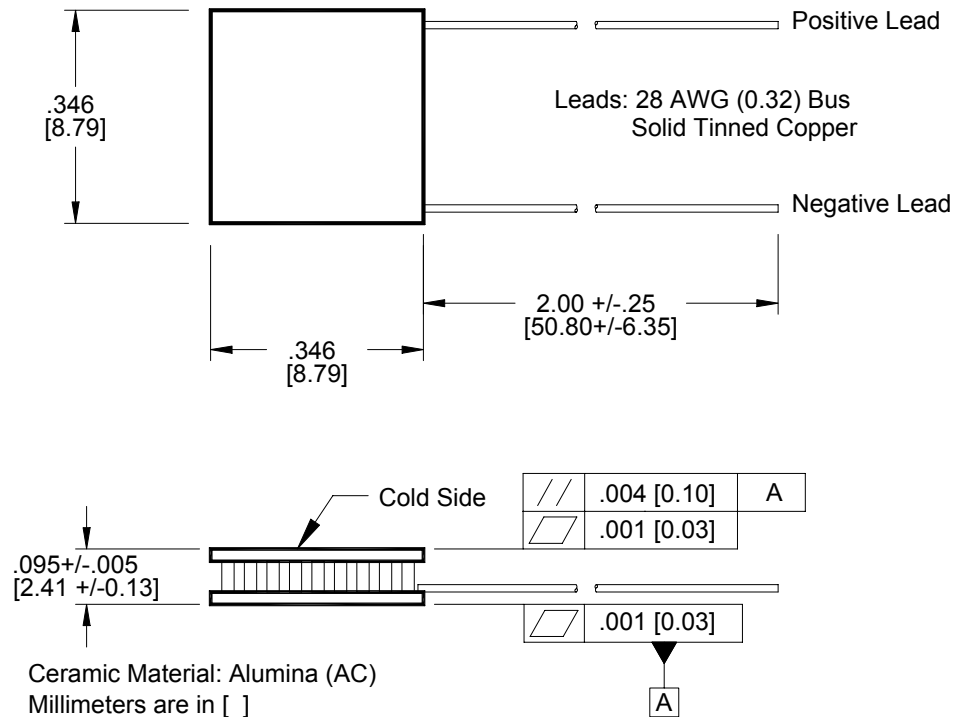
**Thermoelectric Cooler NL1012T**

**Performance Values**

Hot Side Temperature (°C)	27°C	50°C
Δ Tmax (°C-dry N <sub>2</sub> ):	61	68
Qmax (watts):	2.1	2.4
I <sub>max</sub> (amps):	1.0	1.0
V <sub>max</sub> (vdc):	3.7	4.2
AC Resistance (ohms):	3.24	---



**Mechanical Characteristics**



**Ordering Options**

Model Number	Description
NL1012T-01	both surfaces are metallized
NL1012T-02	hot side exterior is metallized
NL1012T-03	no metallization

**Features**

- **RoHS 2002/95/EC compliant**
- For example, and NL1012T with only the hot side metallized is specified as an NL1012T-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.

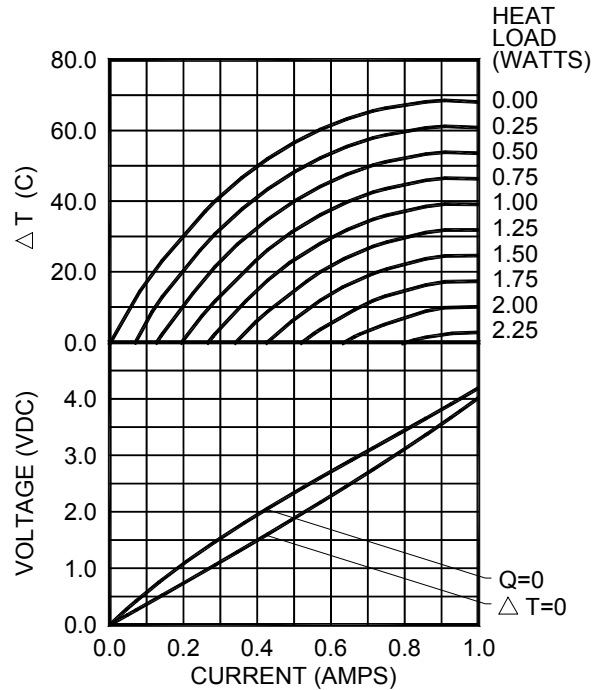
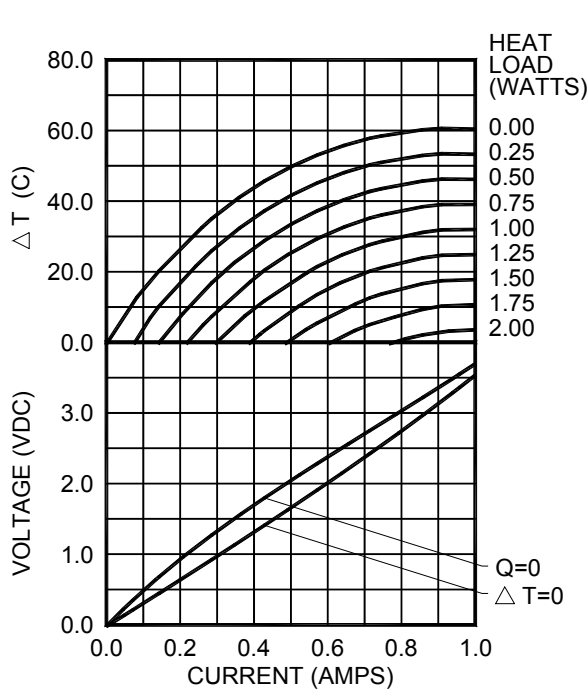


**Performance Curves**

**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.

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