



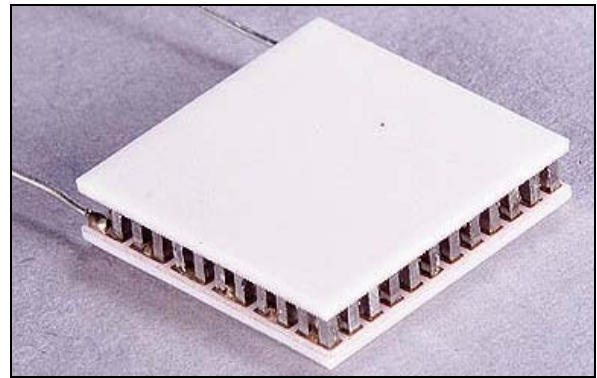
**RoHS 2002/95/EC Compliant**

TECHNICAL DATA SHEET

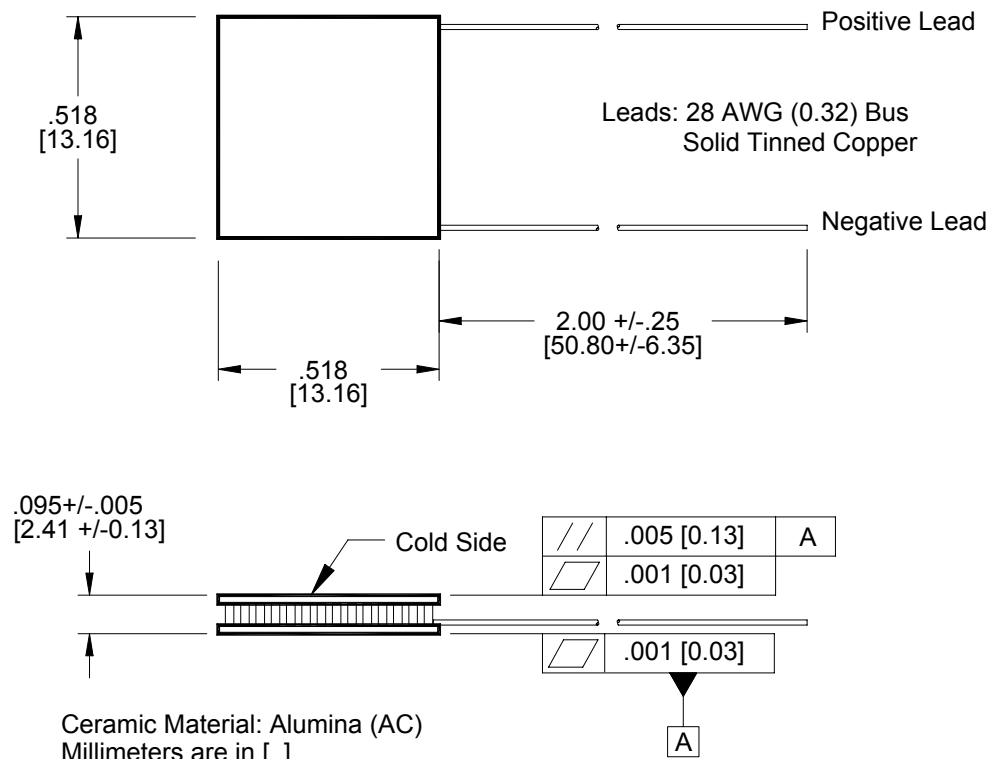
## Thermoelectric Cooler NL1013T

### Performance Values

Hot Side Temperature (°C)	27°C	50°C
Δ Tmax (°C-dry N <sub>2</sub> ):	61	69
Qmax (watts):	4.8	5.4
I <sub>max</sub> (amps):	1.0	1.0
V <sub>max</sub> (vdc):	8.5	9.6
AC Resistance (ohms):	7.42	---



### Mechanical Characteristics



### Ordering Options

Model Number	Description
NL1013T-01	both surfaces are metallized
NL1013T-02	hot side exterior is metallized
NL1013T-03	no metallization

### Features

- **RoHS 2002/95/EC compliant**
- For example, and NL1013T with only the hot side metallized is specified as an NL1013T-02AC

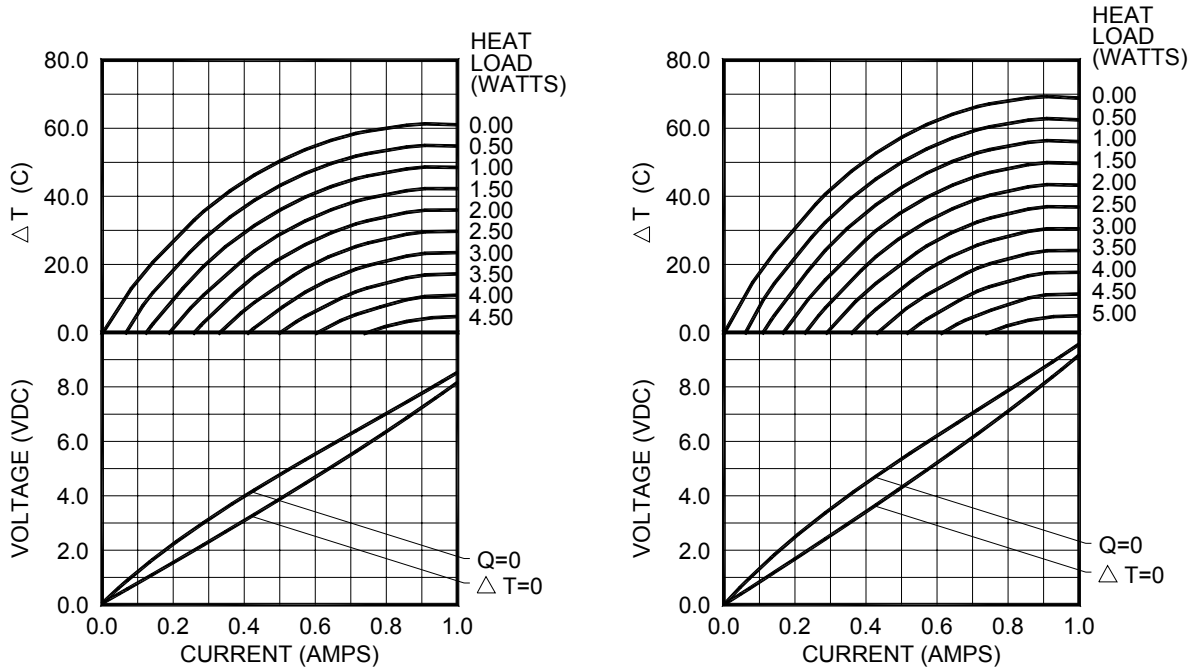
### Available Modifications

- 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



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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