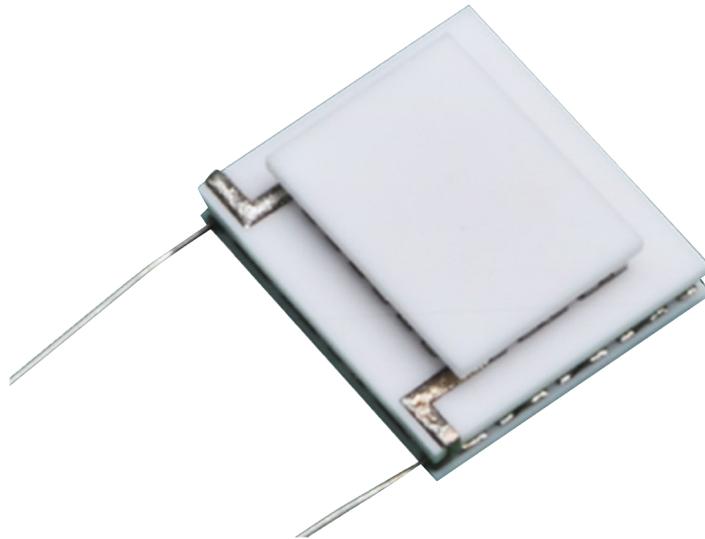


Thermoelectric Coolers (TEC)

# MULTI-STAGE THERMOELECTRIC COOLER NL2012T

## Multi-Stage Thermoelectric Module



## FEATURES

- RoHS EU Compliant
- Rated operating temperature of 85°C
- Maximum processing temperature of 120°C
- AC Suffix indicates Aluminum oxide ceramics
- AB Suffix indicates Aluminum oxide ceramics top and base, and Beryllium oxide mid-ceramic

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## Nominal Performance in Nitrogen

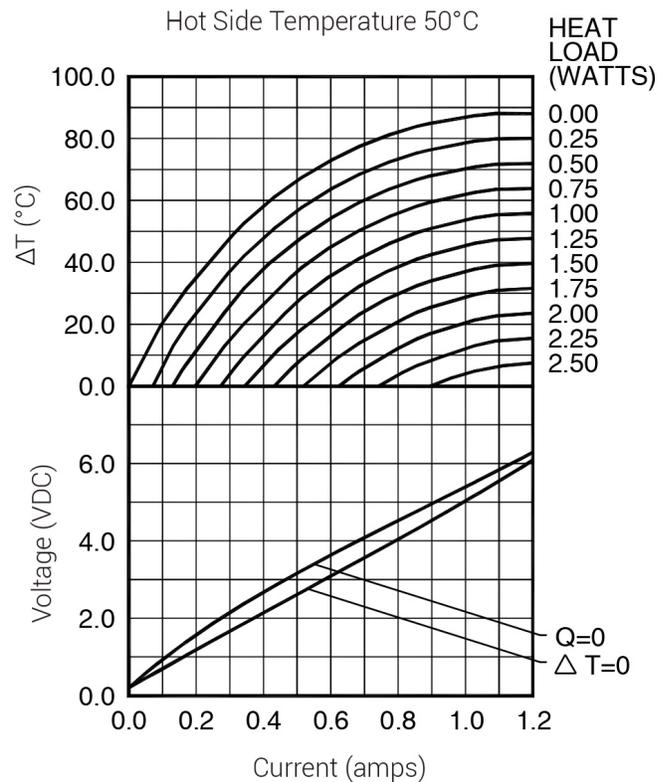
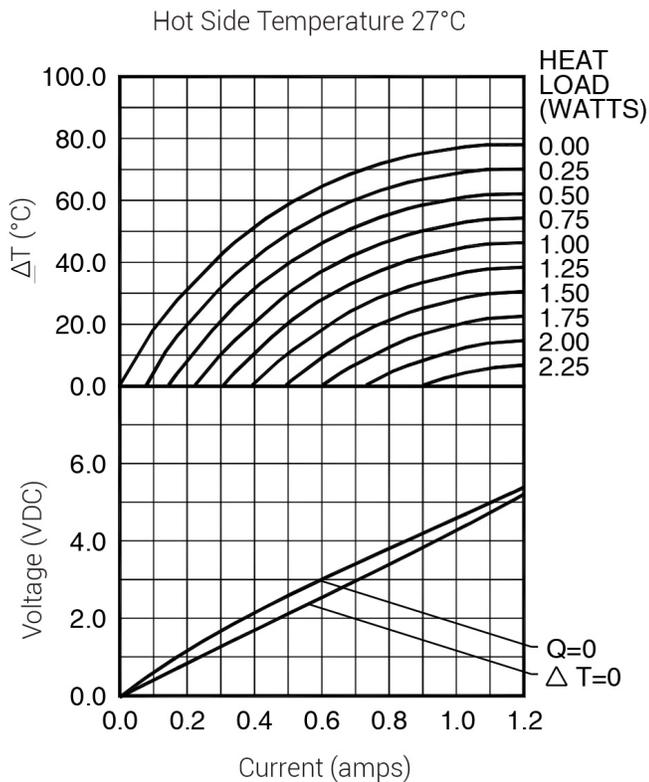
Hot Side Temperature (°C)	27	50
$\Delta T_{max}$ (°C)	77	88
Qmax (watts)	2.4	2.5
I <sub>max</sub> (amps)	1.2	1.2
V <sub>max</sub> (vdc)	5.4	6.1
AC Resistance (ohms)	4.18	--

## Ordering Options

Model Number	Description
NL2012T-01AC	Both Surfaces are Metallized
NL2012T-01BC	Both Surfaces are Metallized
NL2012T-02AC	Hot Side Exterior is Metallized
NL2012T-02BC	Hot Side Exterior is Metallized
NL2012T-03AC	No Metallization
NL2012T-03BC	No Metallization

## Typical 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, please contact us.

## 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.

## Installation

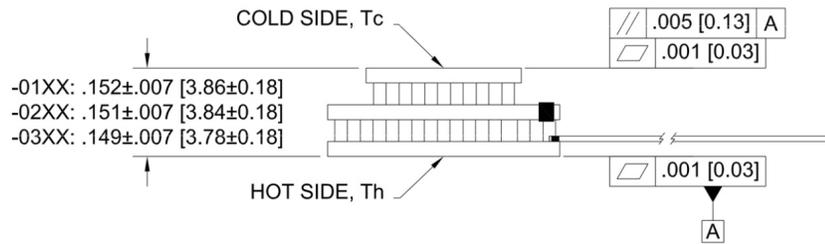
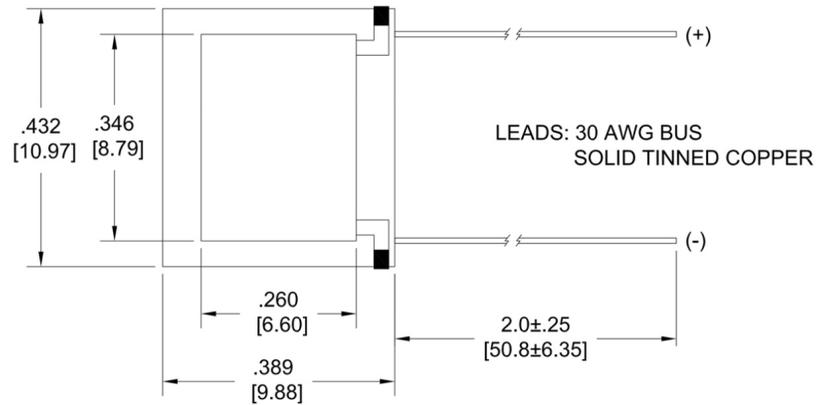
Recommended mounting methods: Bonding with thermal epoxy or soldering with metallized ceramics. For additional information, please refer to our TEM Installation Guide.

# MULTI-STAGE THERMOELECTRIC COOLER NL2012T

## Mechanical Characteristics

### Beryllium Oxide Handling Precautions

Beryllium oxide can be toxic only when dust, mist, or fumes containing particles small enough to enter the lungs are inhaled. For the user, precautions required are to avoid grinding, machining or pulverizing the material by mechanical, thermal, or chemical processing.



All units are in inches and [ ] are in millimeters unless otherwise stated.