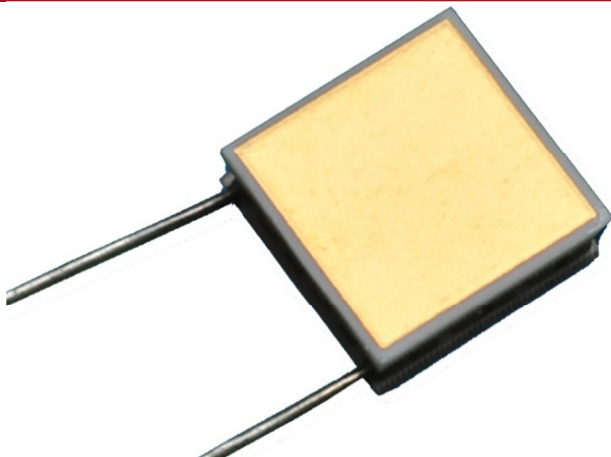




# Technical Data Sheet for NL1021T

## Single-Stage Thermoelectric Module



### NOMINAL PERFORMANCE IN NITROGEN

|                           |      |     |
|---------------------------|------|-----|
| Hot Side Temperature (°C) | 27   | 50  |
| $\Delta T_{max}$ (°C):    | 64   | 72  |
| Q <sub>max</sub> (watts): | 2.2  | 2.5 |
| I <sub>max</sub> (amps):  | 1.8  | 1.8 |
| V <sub>max</sub> (vdc):   | 1.9  | 2.2 |
| AC Resistance (ohms):     | 0.92 | --  |

### PRODUCT FEATURES

- RoHS EU Compliant
- Rated operating temperature of 85°C
- Maximum process temperature is 120°C.
- Ceramic Material: Aluminum Oxide
- -04AC: Thermistor mounted on edge of cold side ceramic
- -01AC, -02AC, -04AC: External Metallization is Au flash, suitable for soldering.

### ORDERING OPTIONS

| Model Number | Description                                                   |
|--------------|---------------------------------------------------------------|
| NL1021T-01AC | Both Surfaces are Metallized                                  |
| NL1021T-02AC | Hot Side Exterior is Metallized                               |
| NL1021T-03AC | No Metallization                                              |
| NL1021T-04AC | Hot side Exterior Metallization, Cold Side Mounted Thermistor |

### 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 TEC Installation Guide.

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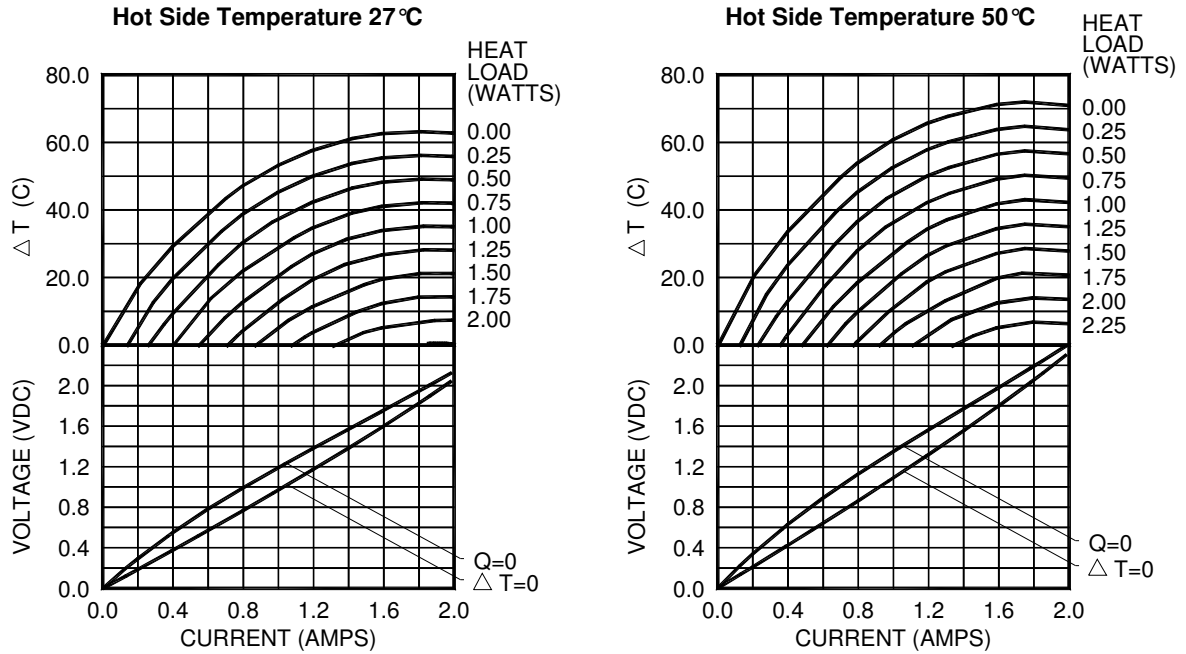
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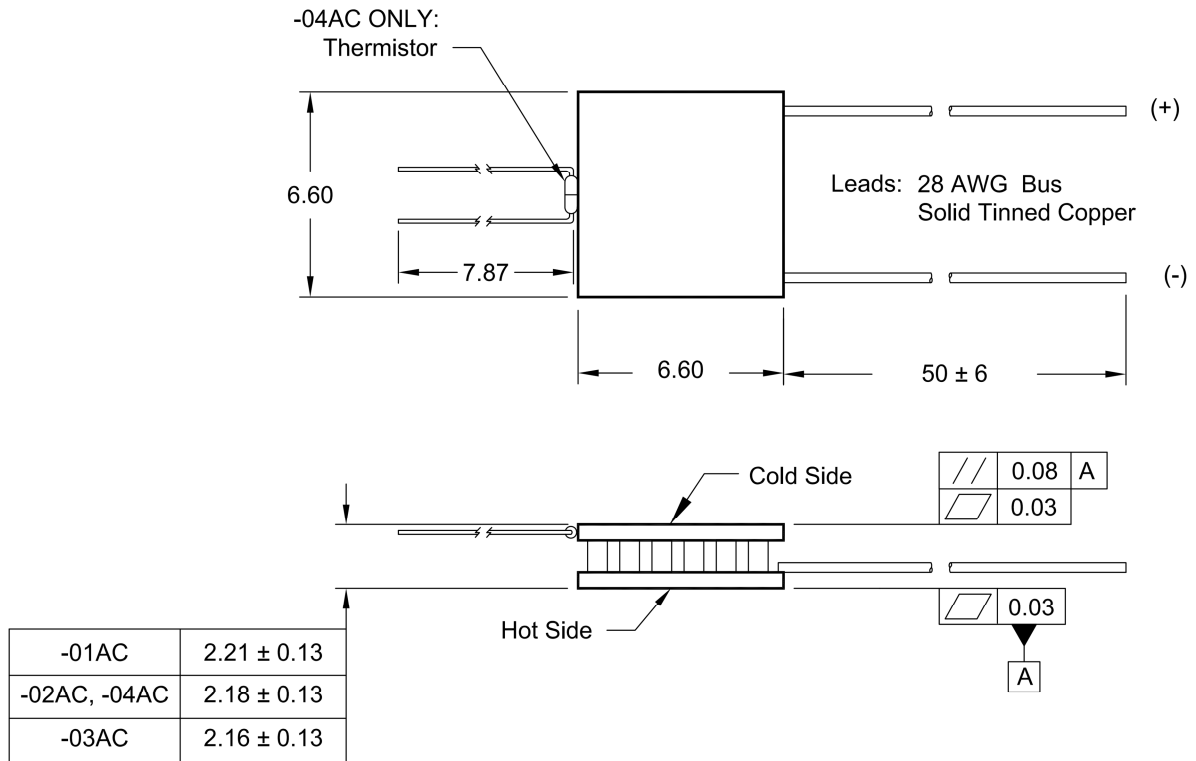
## TYPICAL PERFORMANCE CURVES

ENVIRONMENT: ONE ATMOSPHERE DRY NITROGEN



For performance information in a vacuum or with hot side temperatures other than 27°C or 50°C, contact one of our Applications Engineers at 877-627-5691.

## MECHANICAL CHARACTERISTICS



Dimensions are in millimeters.

For customer support or general questions please contact a local office or visit our website at [www.marlow.com](http://www.marlow.com).

Marlow reserves the right to make product changes without notice.