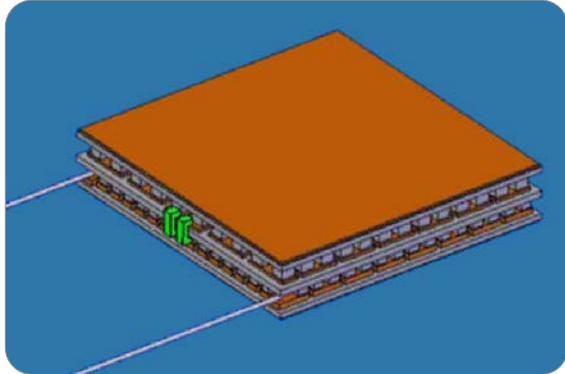




# Technical Data Sheet for NL2070

## Single-Stage Thermoelectric Module



### NOMINAL PERFORMANCE

#### Nitrogen

Hot Side Temperature (°C)	27	50
$\Delta T_{max}$ (°C):	81	91
Qmax (watts):	45.0	50.0
I <sub>max</sub> (amps):	7.2	7.2
V <sub>max</sub> (vdc):	15.5	17.2
AC Resistance (ohms):	1.92	—

#### Vacuum

Hot Side Temperature (°C)	27	50
$\Delta T_{max}$ (°C):	88	100
Qmax (watts):	46.0	51.0
I <sub>max</sub> (amps):	7.2	7.2
V <sub>max</sub> (vdc):	15.5	17.2
AC Resistance (ohms):	1.92	—

### PRODUCT FEATURES

- RoHS EU Compliant
- Rated operating temperature of 85°C.
- Maximum processing temperature of 120°C
- Ceramic material: Aluminum Oxide
- Superior nickel diffusion barriers on elements.
- High strength for rugged environment.
- Pretinned metallized ceramic surface 117°C solder option available.
- Ideal for large temperature differentials ( $\Delta T$ ) and large heat pumping applications.

### ORDERING OPTIONS

Model Number	Description
NL2070-01AC	TEM, Top and Base metallized exterior
NL2070-02AC	TEM, Base metallized exterior
NL2070-03AC	TEM, no metallized exterior
NL2070-04AC	-02AC with hot side pretinned with 117°C solder

### 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 method: Clamp with uniform pressure to a flat surface with thermal interface material. For additional information, please refer to our TEC Installation Guide.

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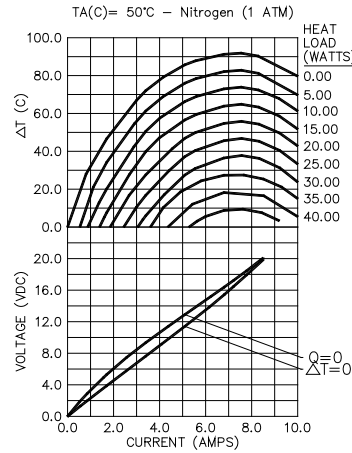
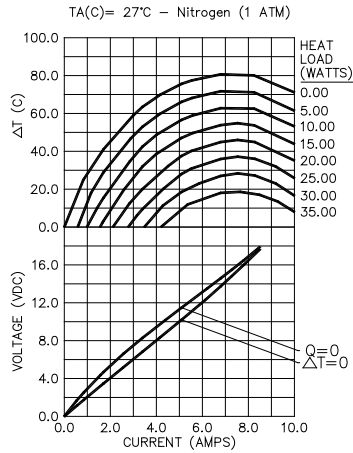
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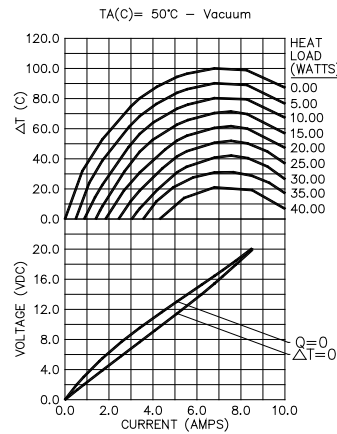
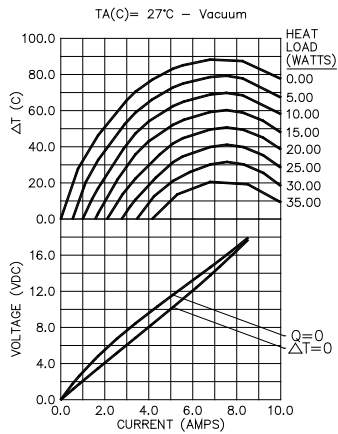
TYPICAL PERFORMANCE CURVES

**ENVIRONMENT:**

**Nitrogen**

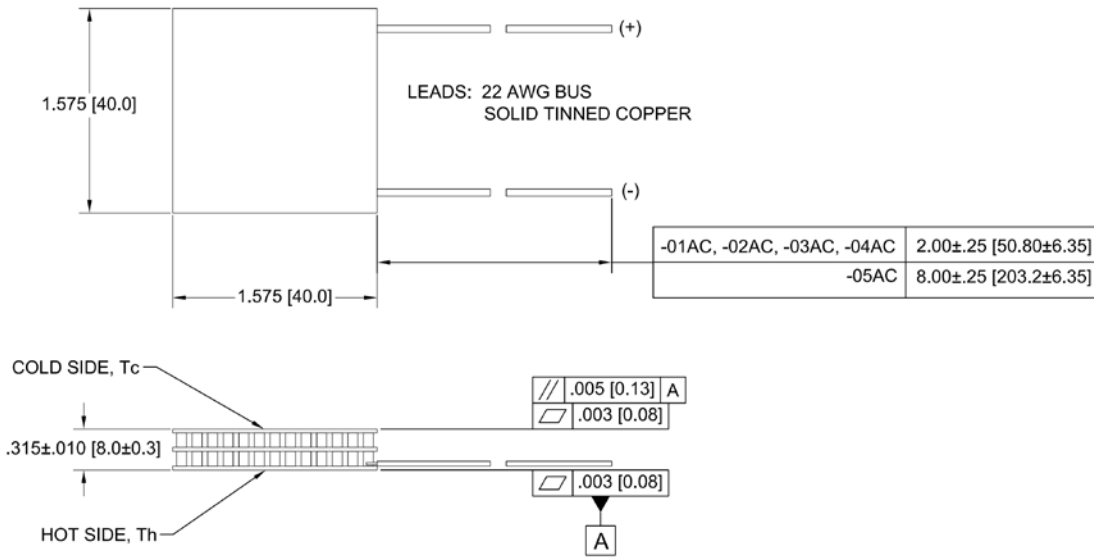


**Vacuum**



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 shown are inches [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.