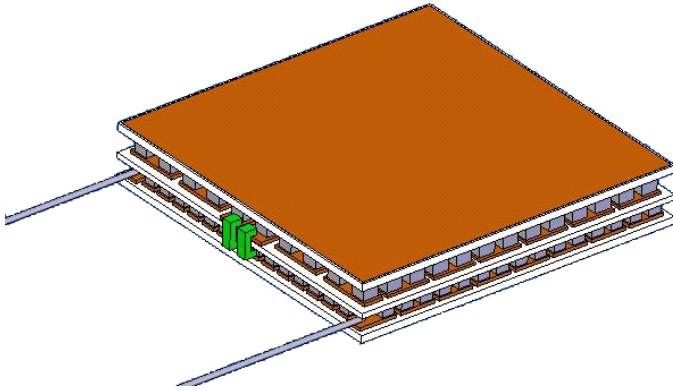




# Technical Data Sheet for NL2076

## Multi-Stage Thermoelectric Module



### NOMINAL PERFORMANCE

#### Nitrogen (1 ATM)

Hot Side Temperature (°C)	27	50
$\Delta T_{max}$ (°C):	80	90
Qmax (watts):	44.6	49.3
I <sub>max</sub> (amps):	7.2	7.1
V <sub>max</sub> (vdc):	15.5	17.2
AC Resistance (ohms):	1.93	---

#### Vacuum (10<sup>-5</sup> TORR)

Hot Side Temperature (°C)	27	50
$\Delta T_{max}$ (°C):	87	99
Qmax (watts):	45.0	49.9
I <sub>max</sub> (amps):	7.1	7.1
V <sub>max</sub> (vdc):	15.5	17.2
AC Resistance (ohms):	1.93	---

### PRODUCT FEATURES

- RoHS EU Compliant
- Ideal for large temperature differentials ( $\Delta T$ ) and large heat pumping application.
- Rated operating temperature of 130°C.
- Superior nickel diffusion barriers on elements.
- High strength for rugged environment.
- Pre-tinned metallized ceramic surfaces(s) with 117°C solder option available.
- Burn-in test data option available.
- Lapped option available.

### ORDERING OPTIONS

Model Number	Description
NL2076-01AC	TEM, Top and Base Metallized Exterior
NL2076-02AC	TEM, Base Metallized Exterior
NL2076-03AC	TEM, No Metallized Exterior
NL2076-04AC	TEM, Base Pre-tinned w/117°C solder
NL2076-05AC	TEM, Top & Base Metallized Exterior, 203mm Insulated Wires
NL2076-06AC	TEM, No Metallized Exterior, 102mm Au over Ni over Cu Wires, Burn-In Test & Data
NL2076-08AC	TEM, No Metallized Exterior, 203mm Insulated Wires
NL2076-09AC	TEM, No Metallized Exterior, Lapped, 203mm Insulated Wires

### 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.

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II-VI Singapore Pte., Ltd.  
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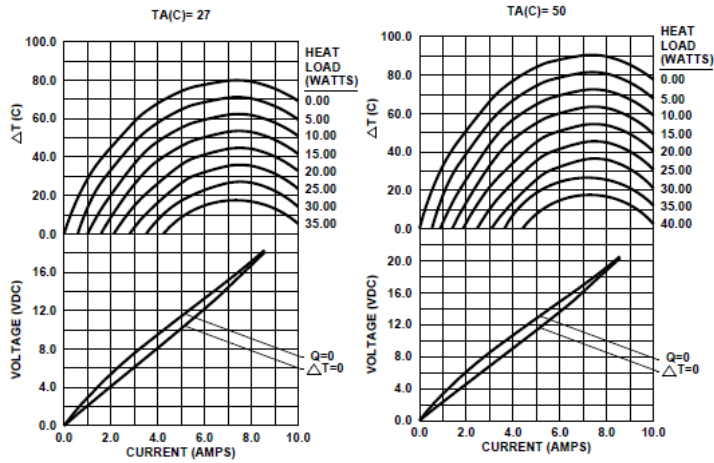
Marlow Industries China, II-VI  
Technologies Beijing  
86-10-643 98226  
info@iivibj.com



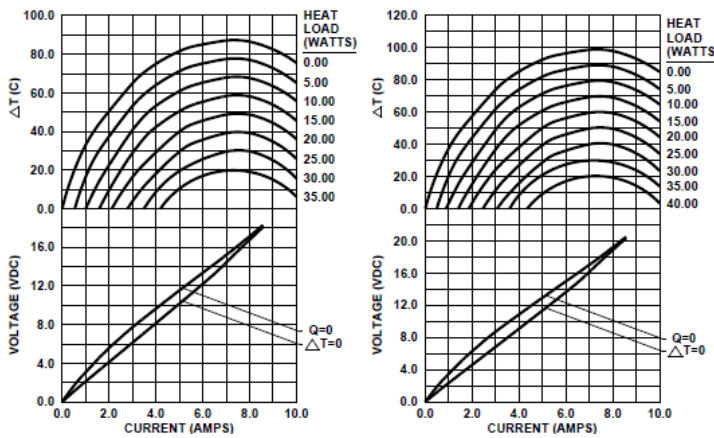
TYPICAL PERFORMANCE CURVES

**ENVIRONMENT:**

**Nitrogen (1 ATM)**

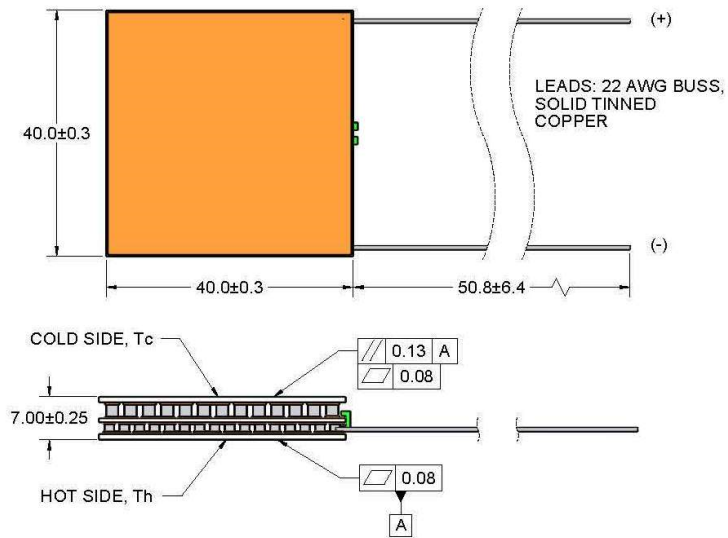


**Vacuum ( $10^{-5}$  TORR)**



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

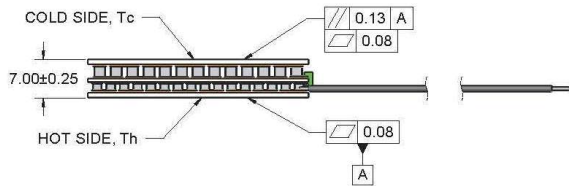
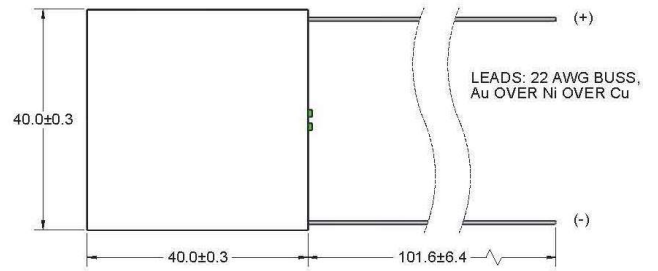
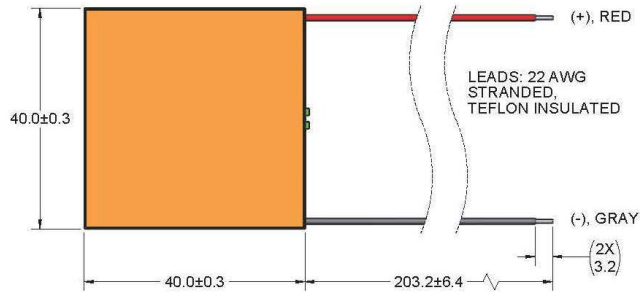


**-01AC THRU -04AC**

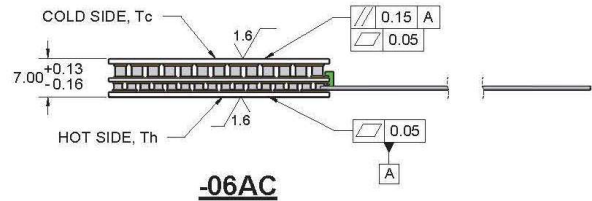
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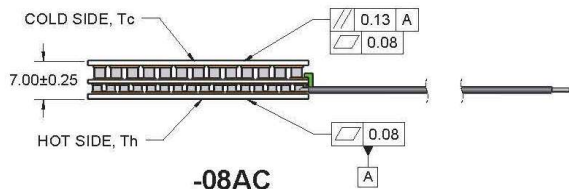
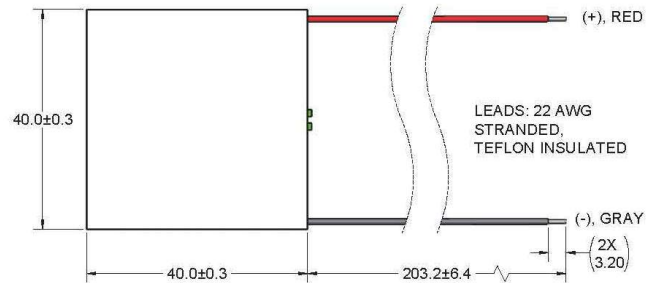
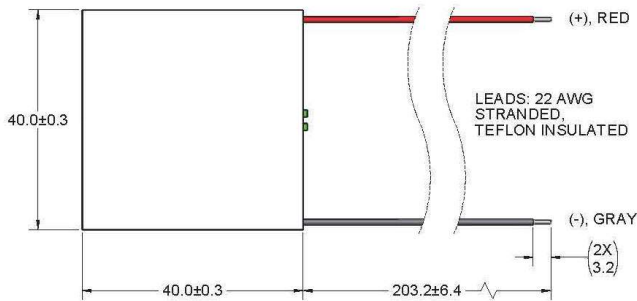
MECHANICAL CHARACTERISTICS



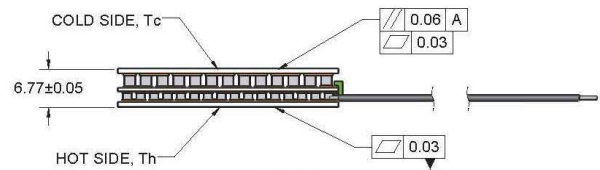
**-05AC**



**-06AC**



**-08AC**



**-09AC**

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