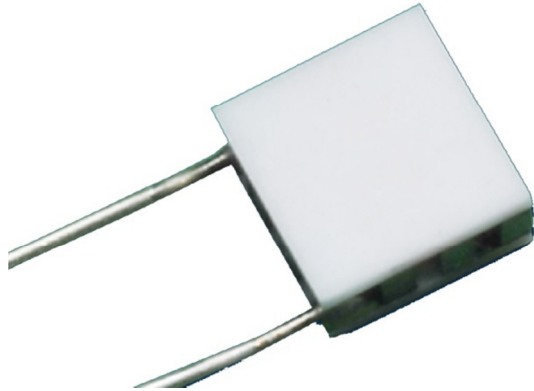




# Technical Data Sheet for NL1011T

## Single-Stage Thermoelectric Module



### NOMINAL PERFORMANCE IN NITROGEN

Hot Side Temperature (°C)	27	50
$\Delta T_{max}$ (°C):	61	69
Qmax (watts):	1.0	1.3
I <sub>max</sub> (amps):	1.0	1.0
V <sub>max</sub> (vdc):	2.0	2.3
AC Resistance (ohms):	1.80	--

### PRODUCT FEATURES

- RoHS EU Compliant
- Rated operating temperature of 85°C
- Maximum process temperature of 120°C
- Ceramic Material: Aluminum Oxide (AC)
- -01AC, -02AC: Exterior metallization is Au flash, suitable for soldering.

### ORDERING OPTIONS

Model Number	Description
NL1011T-01AC	Both Surfaces are Metallized
NL1011T-02AC	Hot Side Exterior is Metallized
NL1011T-03AC	No Metallization

### 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.

II-VI Marlow – Dallas, TX USA  
214-340-4900  
877-627-5691  
marlow.sales@ii-vi.com

Marlow Industries Europe  
GmbH - Germany  
+49 (0) 6150 5439 - 403  
info@marlow-europe.eu

II-VI Japan Inc.  
81 43 297 2693 (tel)  
center@ii-vi.co.jp  
www.ii-vi.co.jp

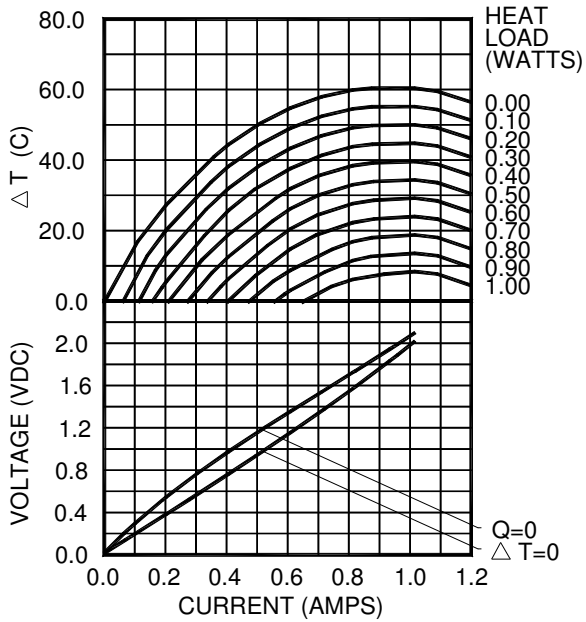
II-VI Singapore Pte., Ltd.  
(65) 6481 8215 (tel)  
info@ii-vi.com.sg

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

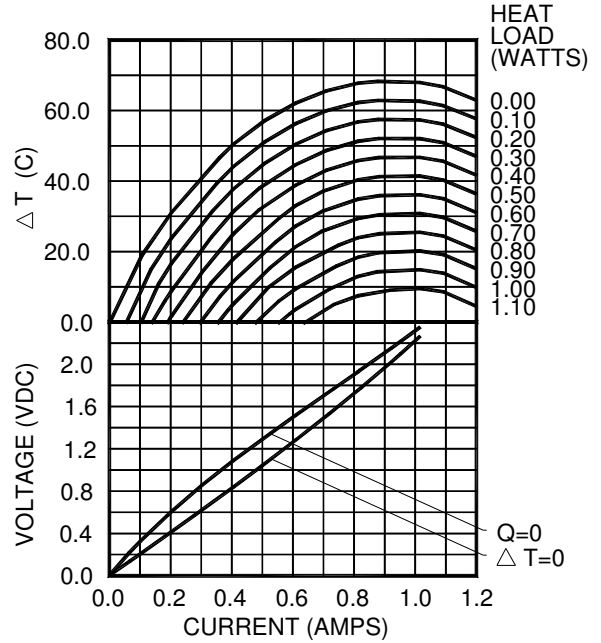


TYPICAL PERFORMANCE CURVES

ENVIRONMENT: ONE ATMOSPHERE DRY NITROGEN  
Hot Side Temperature 27°C

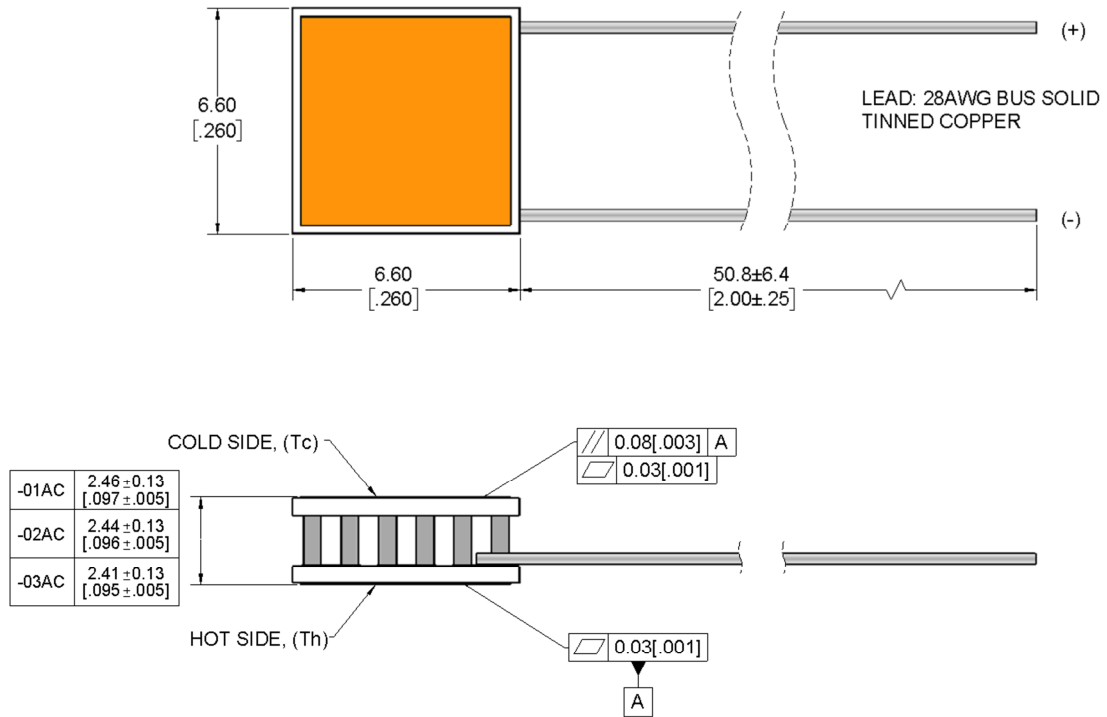


Hot Side Temperature 50°C



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



All units are in millimeters, inches are in [ ].

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.