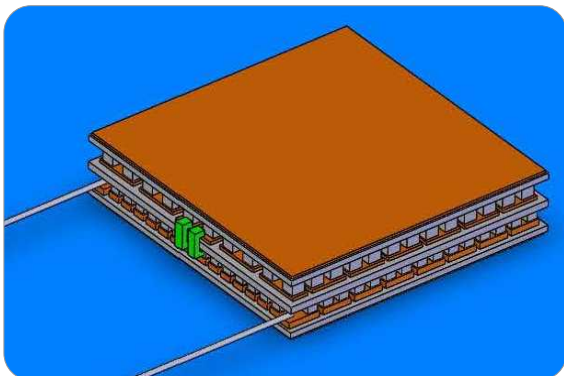




marlow industries, inc.®  
Subsidiary of II-VI INCORPORATED

# TECHNICAL DATA SHEET



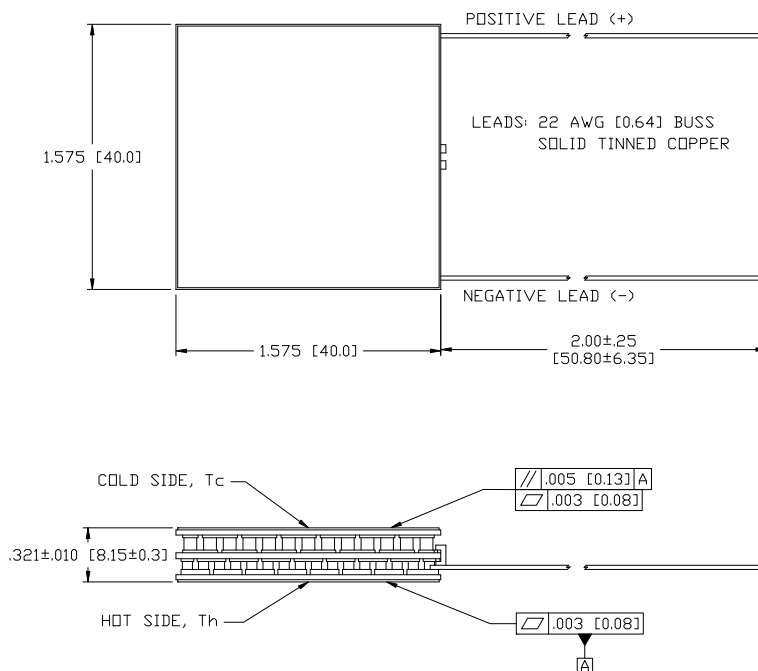
## NL2075

Thermoelectric Cooler  
RoHS EU Compliant

### TYPICAL PERFORMANCE VALUES

Nitrogen		
Hot Side Temperature (°C)	27°C	50°C
Δ Tmax (°C):	80	90
Qmax (watts):	44.0	49.0
Imax (amps):	7.1	7.0
Vmax (vdc):	15.4	17.2
AC Resistance (ohms):	2.10	--
Vacuum		
Hot Side Temperature (°C)	27°C	50°C
Δ Tmax (°C):	87	99
Qmax (watts):	44.5	49.5
Imax (amps):	7.0	7.0
Vmax (vdc):	15.4	17.1
AC Resistance (ohms):	2.10	--

### MECHANICAL CHARACTERISTICS



Dimensions are shown inches [millimeters].

### ORDERING OPTIONS

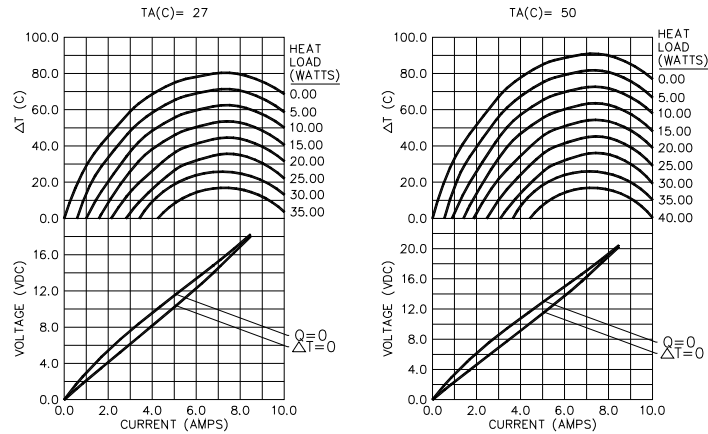
Model Number	Description
NL2075-01AC	both surfaces are metallized
NL2075-02AC	hot side exterior is metallized
NL2075-03AC	no metallization
NL2075-04AC	-02AC with hot side pretinned with 117°C solder
NL2075-05AC	-03AC with 8 inches insulated wires

### AVAILABLE MODIFICATIONS

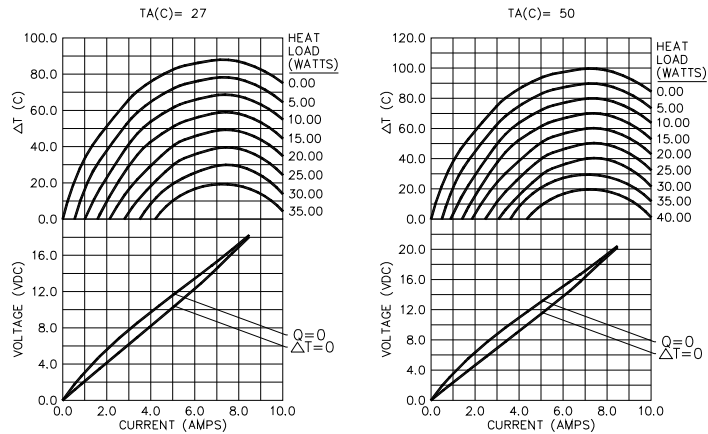
Ideal for large temperature differentials (ΔT) and large heat pumping applications.  
Pretinned metallized ceramic surface(s) with 96°C or 117°C solder.  
Thermistor mounted on edge of cold side ceramic. (Calibration available.)  
Custom designs available to meet any multistage application.

ENVIRONMENT:

**Nitrogen**



**Vacuum**



For performance information in a vacuum or with hot side temperatures other than 27°C or 50°C, consult one of our Applications Engineers.

Installation

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

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.

CONTACT US:

For customer support or general questions please contact a local office below or consult our website for distributor information.

Marlow Industries, Inc.  
10451 Vista Park Road  
Dallas Texas 75238-1645  
214-340-4900 (tel)  
214-341-5212 (fax)  
www.marlow.com

Marlow Industries Europe GmbH  
Brunnenweg 19-21  
64331 Weiterstadt  
Germany  
Tel.: +49 (0) 6150 5439 - 403  
Fax: +49 (0) 6150 5439 - 400  
info@marlow-europe.eu

II-VI Japan Inc.  
WBG Marive East 17F  
2-6 Nakase, Mihama-ku  
Chiba-Shi, Chiba 261-7117  
Japan  
81 43 297 2693 (tel)  
81 43 297 3003 (fax)  
center@ii-vi.co.jp  
www.ii-vi.co.jp

II-VI Singapore Pte., Ltd.  
Blk. 5012, Techplace II  
#04-07 & 05-07/12, Ang Mo Kio Ave. 5  
Singapore 569876  
(65) 6481 8215 (tel)  
(65) 6481 8702 (fax)  
info@ii-vi.com.sg  
www.ii-vi.com.sg

Marlow Industries China, II-VI  
Technologies Beijing  
A subsidiary of II-VI Incorporated  
Rm 202, 1# Lize 2nd Middle Road  
Wangjing, Chaoyang District  
Beijing 100102 China  
010-64398226 ext 105 (tel)  
010-64399315 (fax)  
info@iivibj.com