



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



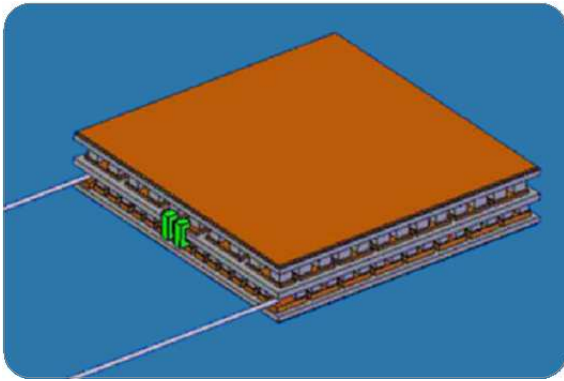
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Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





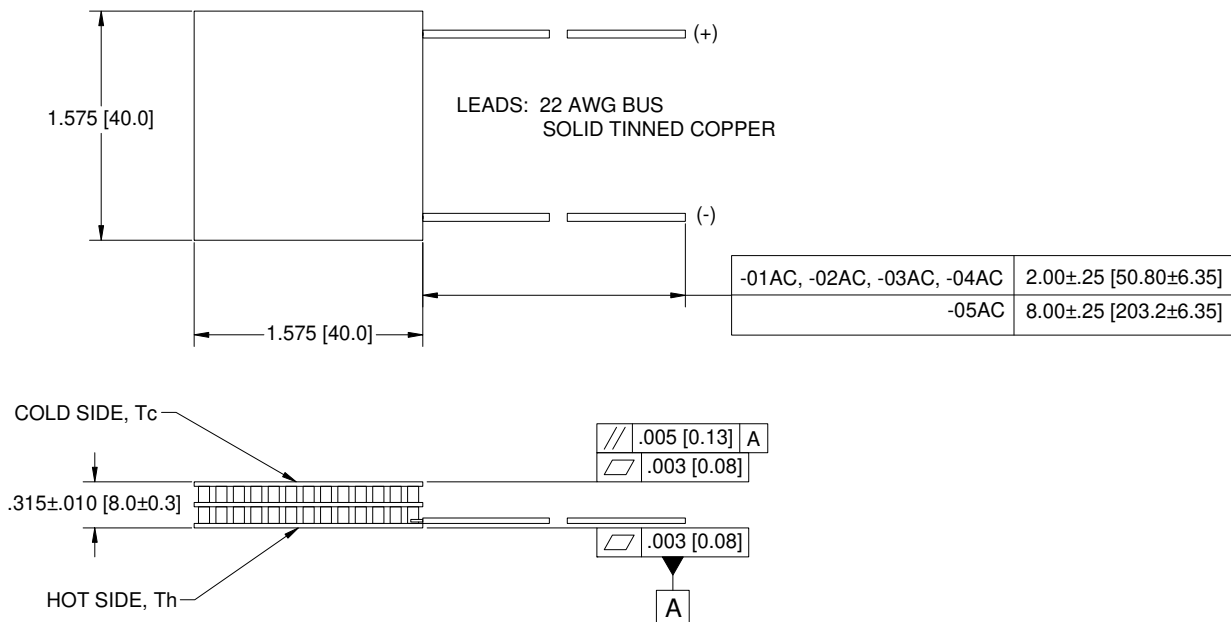
## NL2070

Two-Stage Thermoelectric Cooler  
RoHS EU Compliant

### TYPICAL PERFORMANCE VALUES

Nitrogen		
Hot Side Temperature (°C)	27°C	50°C
Δ Tmax (°C-dry N <sub>2</sub> ):	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°C	50°C
Δ Tmax (°C-dry N <sub>2</sub> ):	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	--

### MECHANICAL CHARACTERISTICS



Dimensions are shown inches [millimeters].

### ORDERING OPTIONS

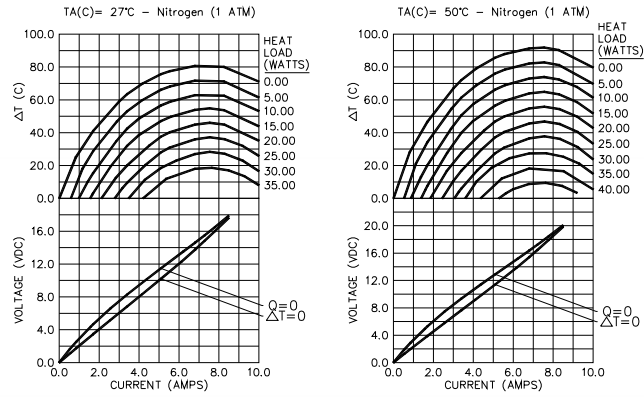
Model Number	Description
NL2070-01AC	TEM, Top and Base Metallized Exterior
NL2070-02AC	TEM, Base Metallized Exterior
NL2070-03AC	TEM, No Metallized Exterior
NL2070-04AC	-02AC with Base Pretinned with 117°C Solder
NL2070-05AC	-01AC with 8 inch Insulated Wires

### PRODUCT FEATURES

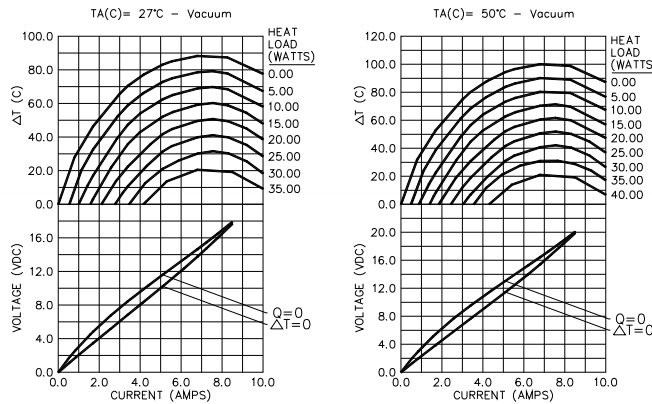
- Ideal for large temperature differentials (ΔT) and large heat pumping applications.
- Rated operating temperature is 130°C.
- Superior nickel diffusion barriers on elements.
- High strength for rugged environment.
- Pretinned metallized ceramic surface(s) 117°C solder option available.

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.

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.

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 visit our website at [www.marlow.com](http://www.marlow.com).

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