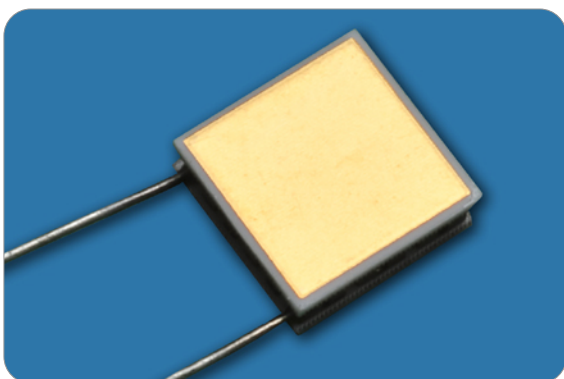




marlow industries, inc.®  
Subsidiary of II-VI INCORPORATED

# TECHNICAL DATA SHEET



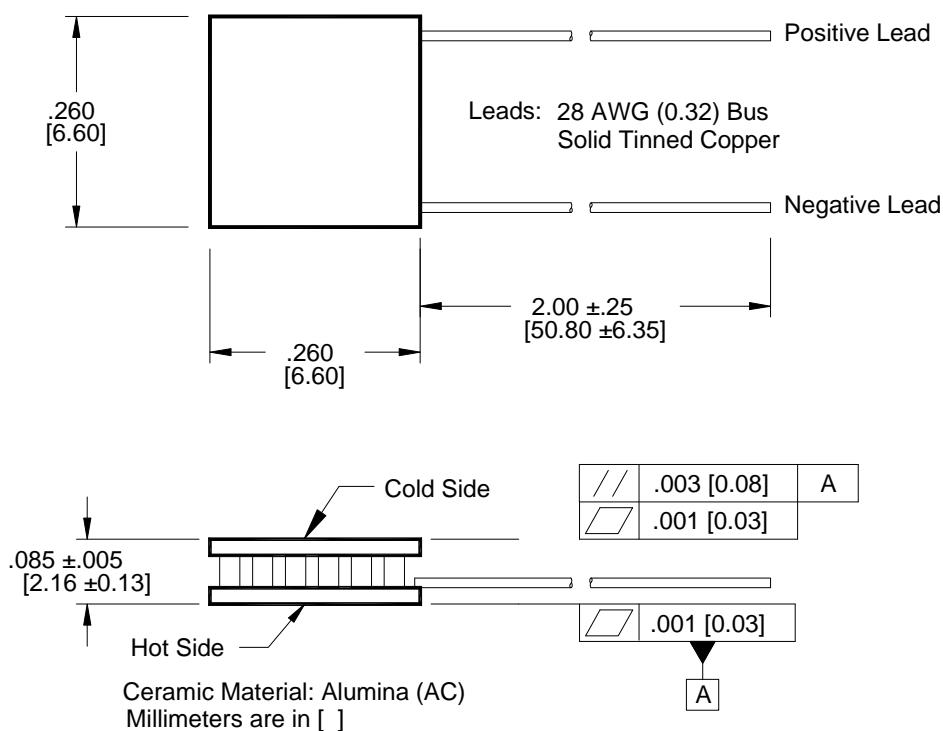
## NL1021T

Single-Stage Thermoelectric Cooler  
RoHS EU Compliant

### TYPICAL PERFORMANCE VALUES

Hot Side Temperature (°C)	27°C	50°C
Δ Tmax (°C-dry N <sub>2</sub> ):	64	72
Qmax (watts):	2.2	2.5
I <sub>max</sub> (amps):	1.8	1.8
V <sub>max</sub> (vdc):	1.9	2.2
AC Resistance (ohms):	0.92	--

### MECHANICAL CHARACTERISTICS

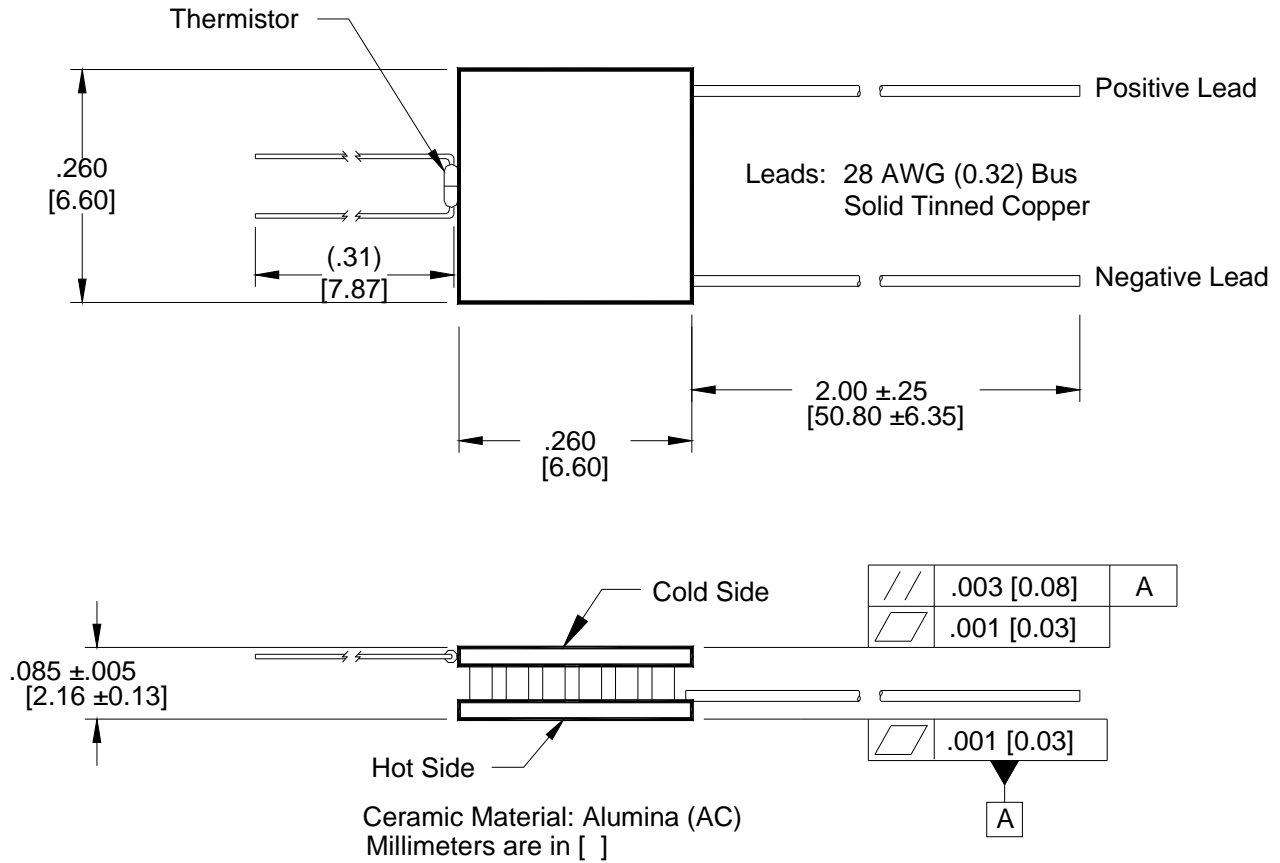


### ORDERING OPTIONS

Model Number	Description
NL1021T-01	both surfaces are metallized
NL1021T-02	hot side exterior is metallized
NL1021T-03	no metallization
NL1021T-04	Base exterior metallization, cold side Mounted Thermistor.

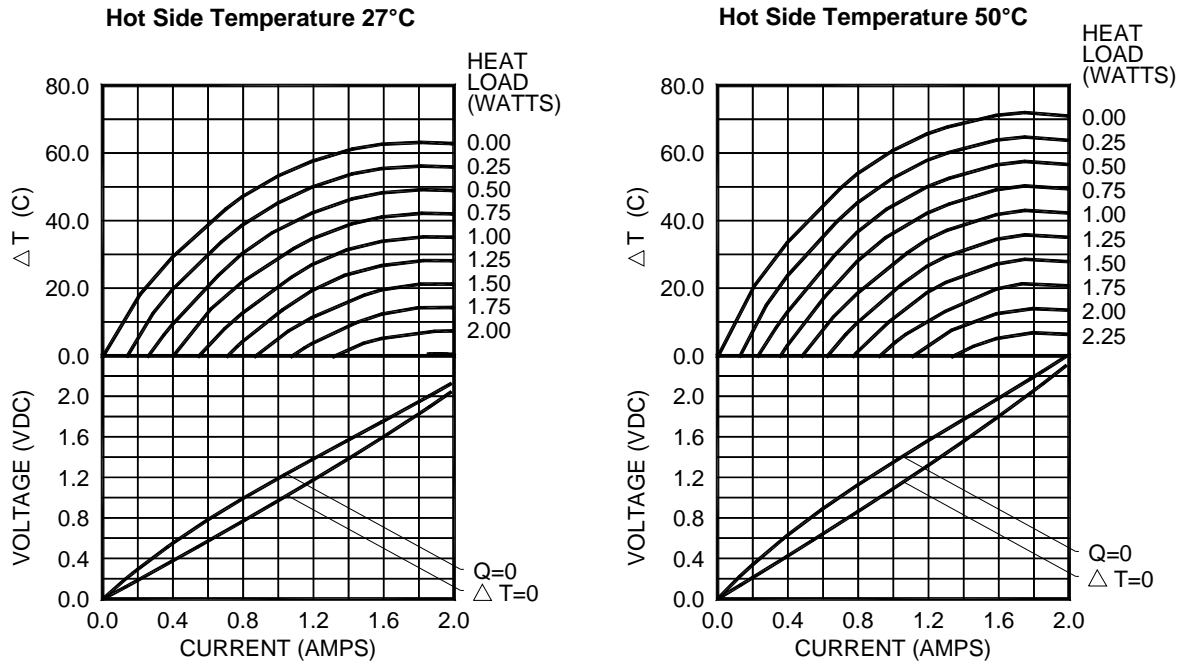
### AVAILABLE MODIFICATIONS

Pretinned metallized ceramic surface(s) with 117°C solder.  
Thermistor mounted on edge of cold side ceramic. (Calibration available.)  
Elevated temperature burn-in with test data provided.



-04

ENVIRONMENT: ONE ATMOSPHERE DRY NITROGEN



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.

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