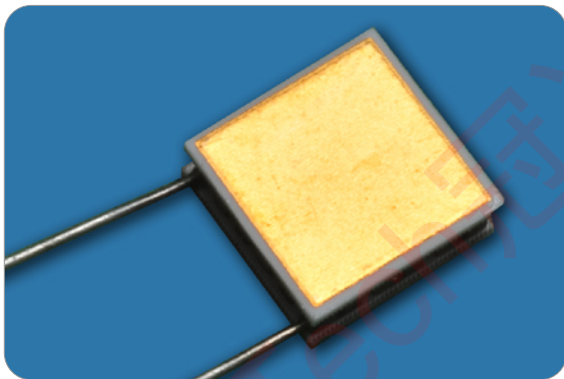




marlow industries, inc.®  
Subsidiary of II-VI INCORPORATED

# TECHNICAL DATA SHEET



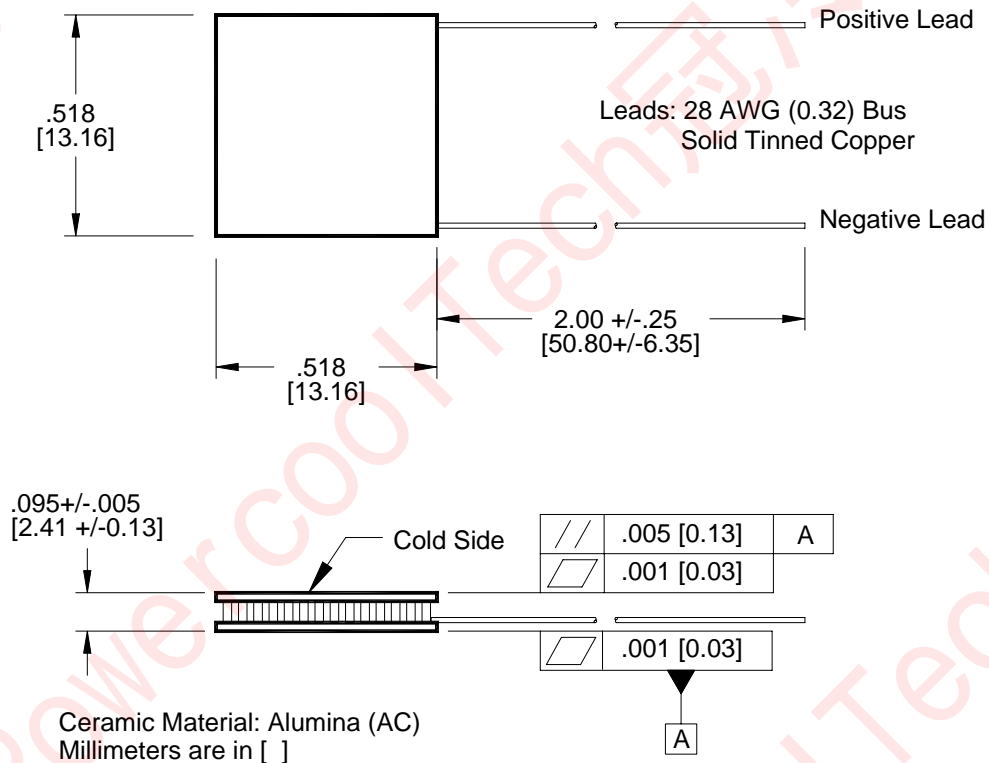
## NL1013T

Single-Stage Thermoelectric Cooler  
RoHS 2002/95/EC Compliant

### PERFORMANCE VALUES

Hot Side Temperature (°C)	27°C	50°C
Δ Tmax (°C-dry N <sub>2</sub> ):	61	69
Qmax (watts):	4.8	5.4
I <sub>max</sub> (amps):	1.0	1.0
V <sub>max</sub> (vdc):	8.5	9.6
AC Resistance (ohms):	7.42	--

### MECHANICAL CHARACTERISTICS



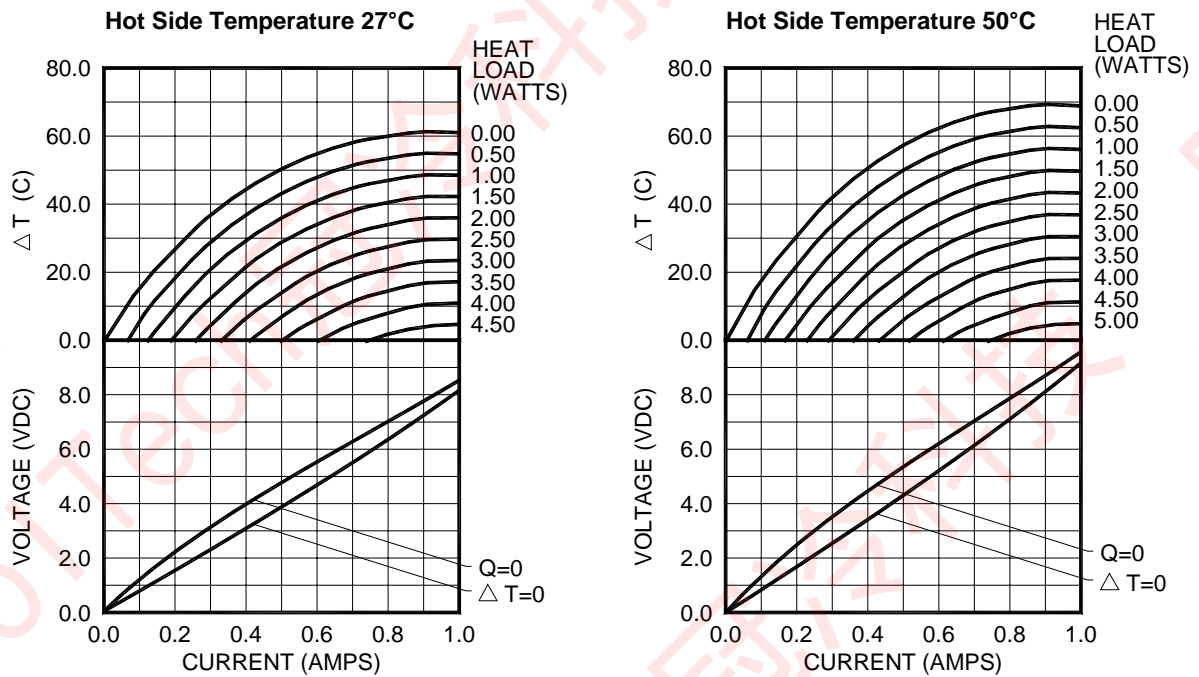
### ORDERING OPTIONS

Model Number	Description
NL1013T-01	both surfaces are metallized
NL1013T-02	hot side exterior is metallized
NL1013T-03	no metallization

### 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.

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.

CONTACT US:

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

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