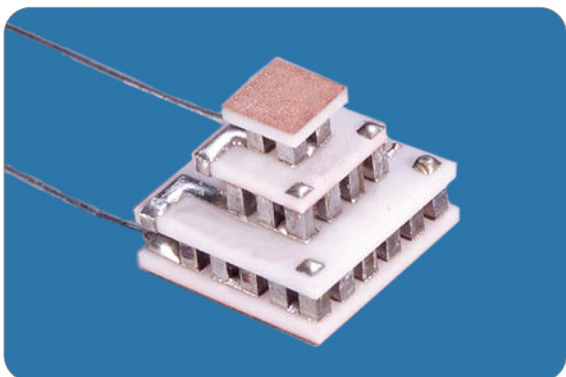




marlow industries, inc.®
Subsidiary of II-VI INCORPORATED

TECHNICAL DATA SHEET



NL3021T-AC/-BC

Thermoelectric Cooler
RoHS EU Compliant
Standard TE Material

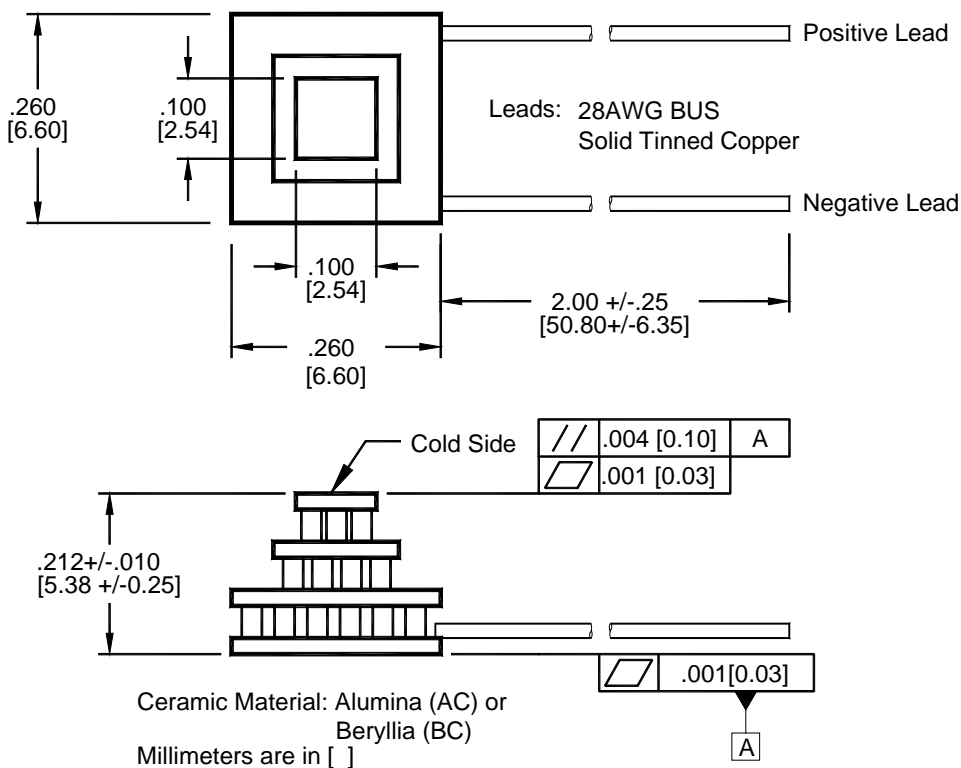
TYPICAL PERFORMANCE VALUES

| | | |
|----------------------------------|------|------|
| Hot Side Temperature (°C) | 27°C | 50°C |
| Δ Tmax (°C-dry N ₂): | 96 | 109 |
| Qmax (watts): | 0.33 | 0.38 |
| Imax (amps): | 1.3 | 1.3 |
| Vmax (vdc): | 1.9 | 2.2 |
| AC Resistance (ohms): | 1.42 | -- |

MECHANICAL CHARACTERISTICS

Beryllium Oxide Handling Precautions

Beryllium oxide can be toxic only when dust, mist, or fumes containing particles small enough to enter the lungs are inhaled. For the user, precautions required are to avoid grinding, machining or pulverizing the material by mechanical, thermal, or chemical processing.
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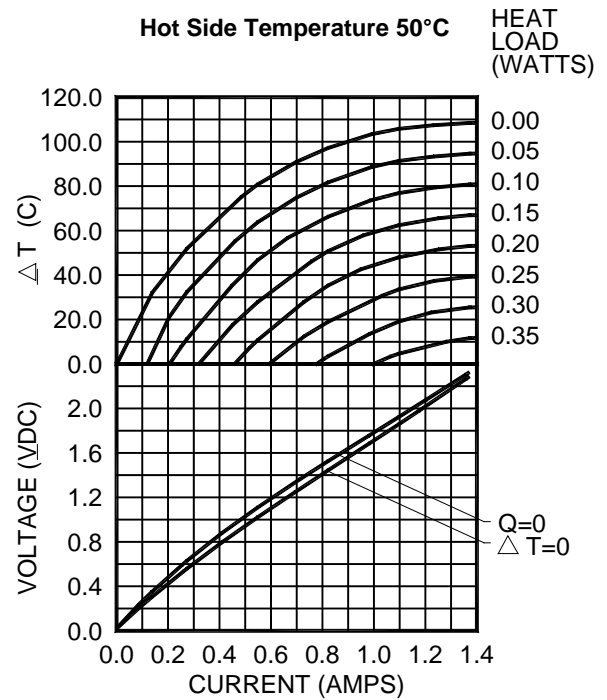
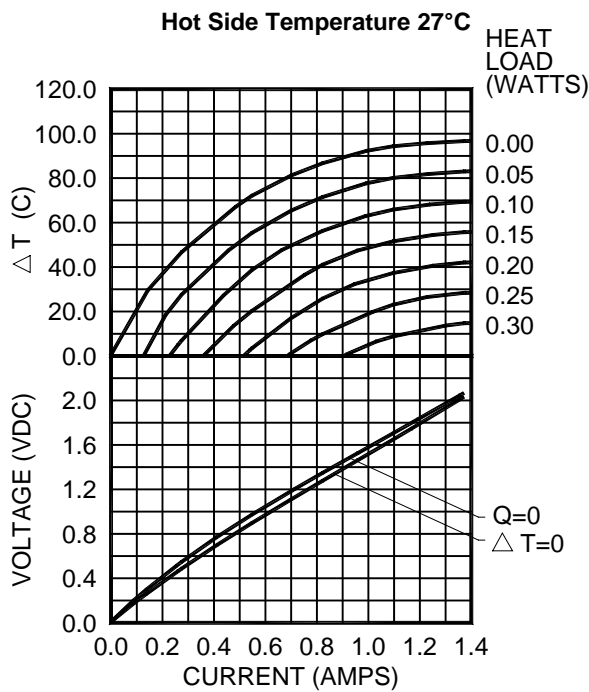
ORDERING OPTIONS

| Model Number | Description |
|--------------|--|
| NL3021T-01 | both surfaces are metallized |
| NL3021T-02 | hot side exterior is metallized |
| NL3021T-03 | no exterior metallization |
| NL3021T-04 | both surfaces are metallized with pretinned hot side |

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



Performance Values and Curves are based on the -AC configuration. For performance information in a vacuum or with hot side temperatures other than 27°C or 50°C, or on the -BC configuration, 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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