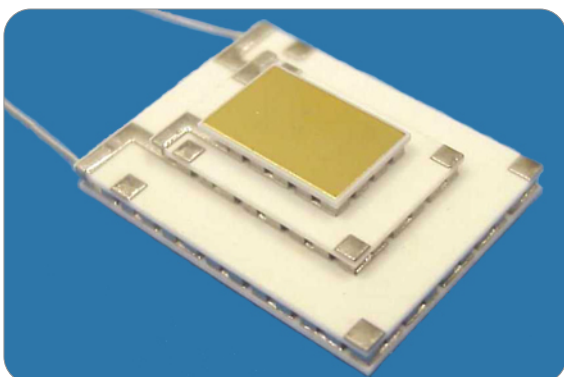




marlow industries, inc.®  
Subsidiary of II-VI INCORPORATED

# TECHNICAL DATA SHEET



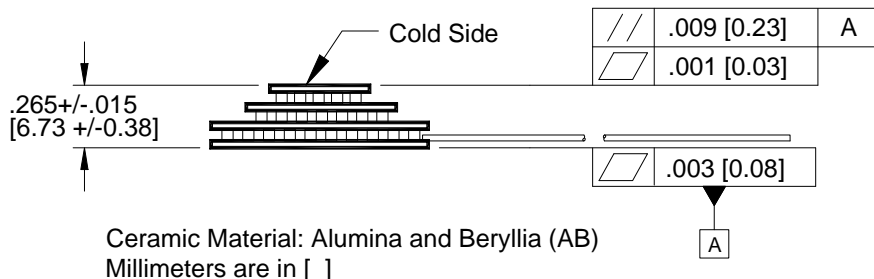
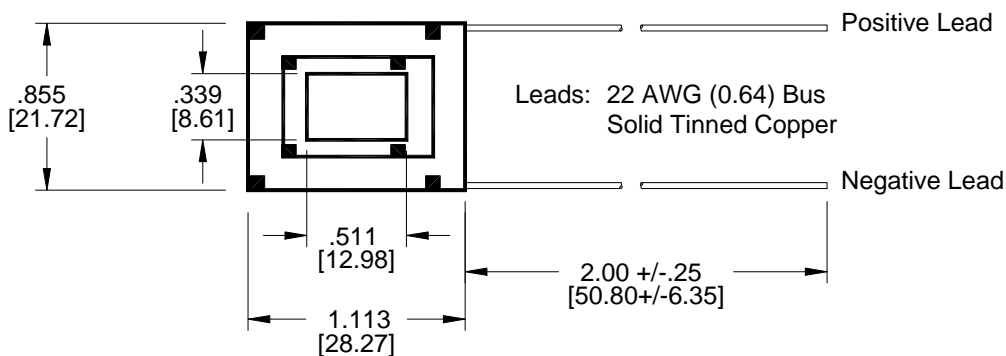
## SP2402

Thermoelectric Cooler  
RoHS EU Compliant

### TYPICAL PERFORMANCE VALUES

Hot Side Temperature (°C)	27°C	50°C
Δ Tmax (°C-dry N <sub>2</sub> ):	109	123
Qmax (watts):	8.7	9.5
I <sub>max</sub> (amps):	5.3	5.3
V <sub>max</sub> (vdc):	8.9	9.9
AC Resistance (ohms):	1.54	--

### 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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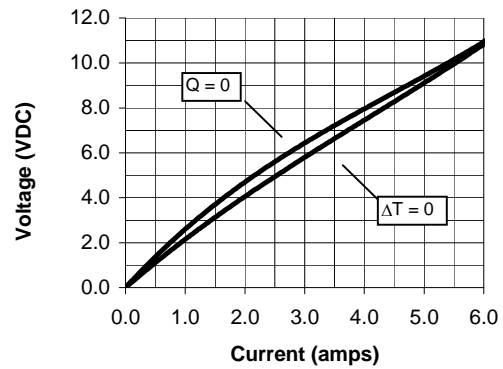
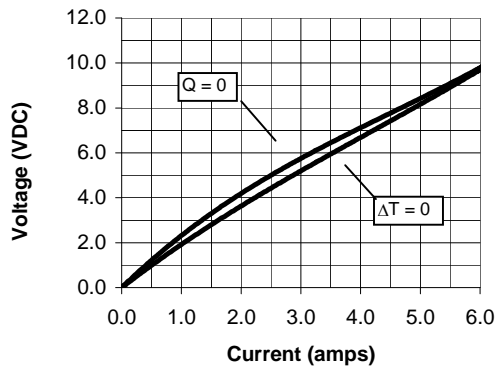
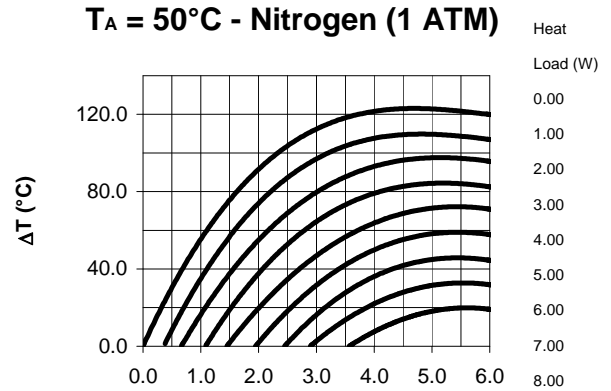
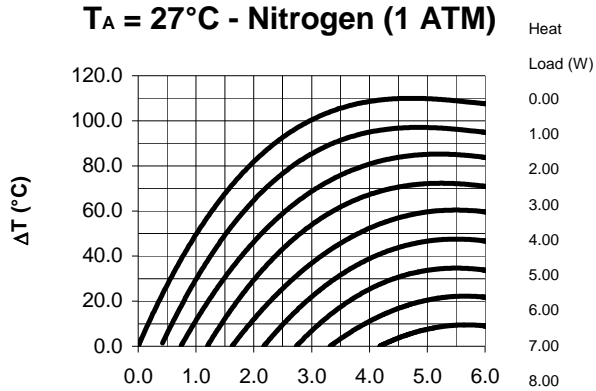
### ORDERING OPTIONS

Model Number	Description
SP2402-01AB	both surfaces are metallized
SP2402-02AB	hot side exterior is metallized
SP2402-03AB	no metallization
SP2402-04AB	metallized. top and base

### 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.  
-04AB: Special height and parallelism requirements and lead orientation.

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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