

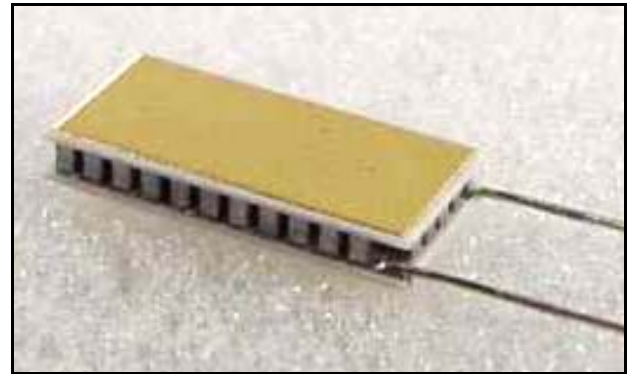


Thermoelectric Cooler – SP5446

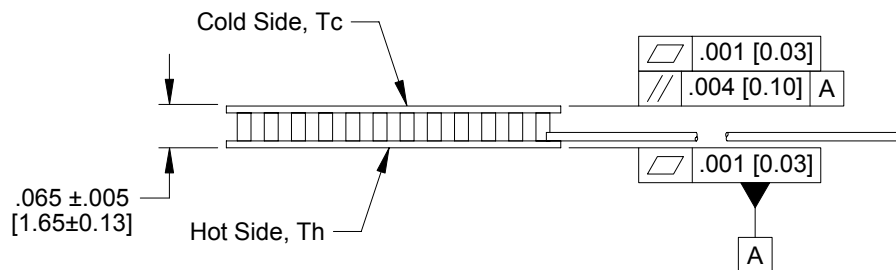
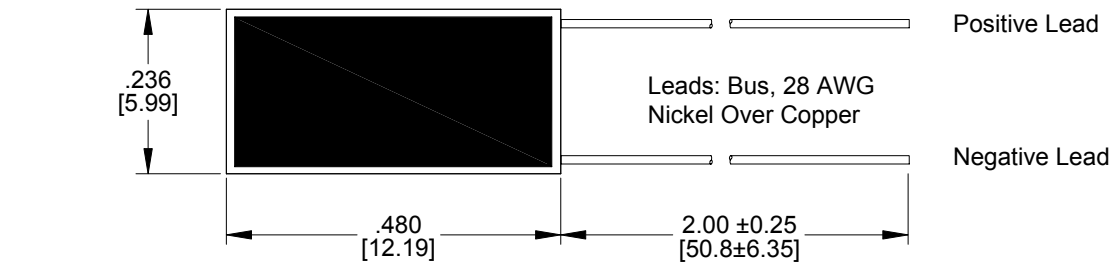
RoHS 2002/95/EC Compliant

Performance Values

Hot Side Temperature (°C)	27°C	85°C
Δ Tmax (°C-dry N ₂):	68.5	88.5
Qmax (watts):	5.0	6.0
I _{max} (amps):	1.9	1.8
V _{max} (vdc):	4.07	5.13
AC Resistance (ohms):	1.85	---



Mechanical Characteristics



Ceramic Material: Alumina (AC) or Aluminum Nitride (ALN)

Dimensions in [] are Millimeters

Ordering Options

Model Number	Description
SP5446-01AC	Metallized exterior
SP5446-01AN	Metallized exterior
SP5446-02AC	Hot Side, Metallized Exterior
SP5446-03AC	No Metallized Exterior

Features

- RoHS 2002/95/EC compliant
- Exterior surfaces may be tinned with various configurations depending on customer requirements.
- For information regarding additional ordering options available, please contact a Marlow Engineering representative.
- ALN – Parallelism is .002 inches.

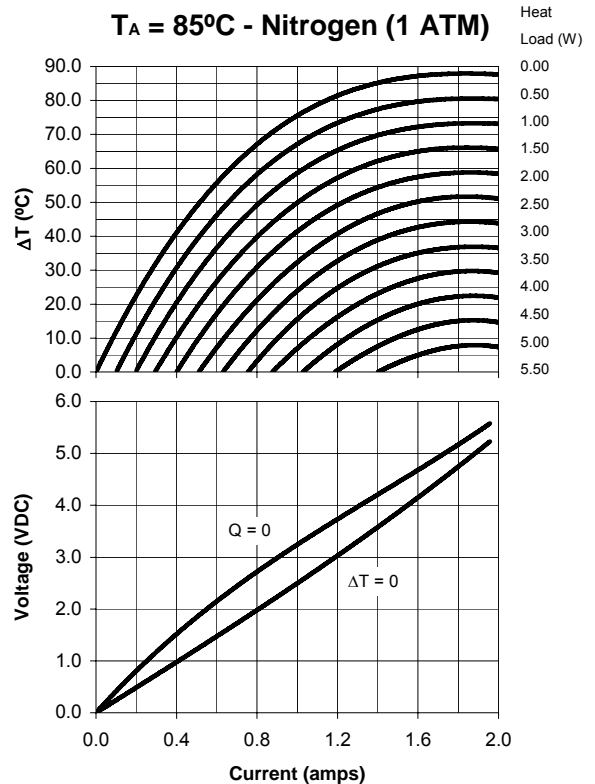
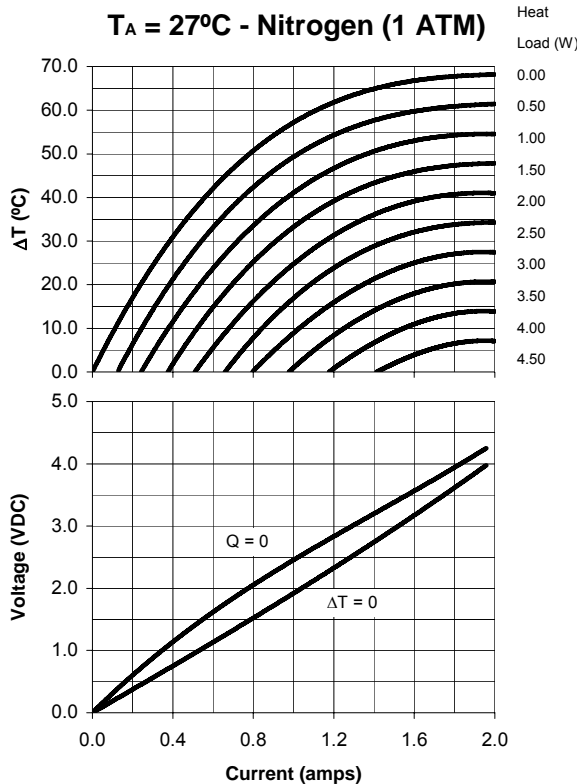


Performance Curves

Environment: One atmosphere dry nitrogen

Hot Side Temperature: 27°C

Hot Side Temperature 85°C



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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