

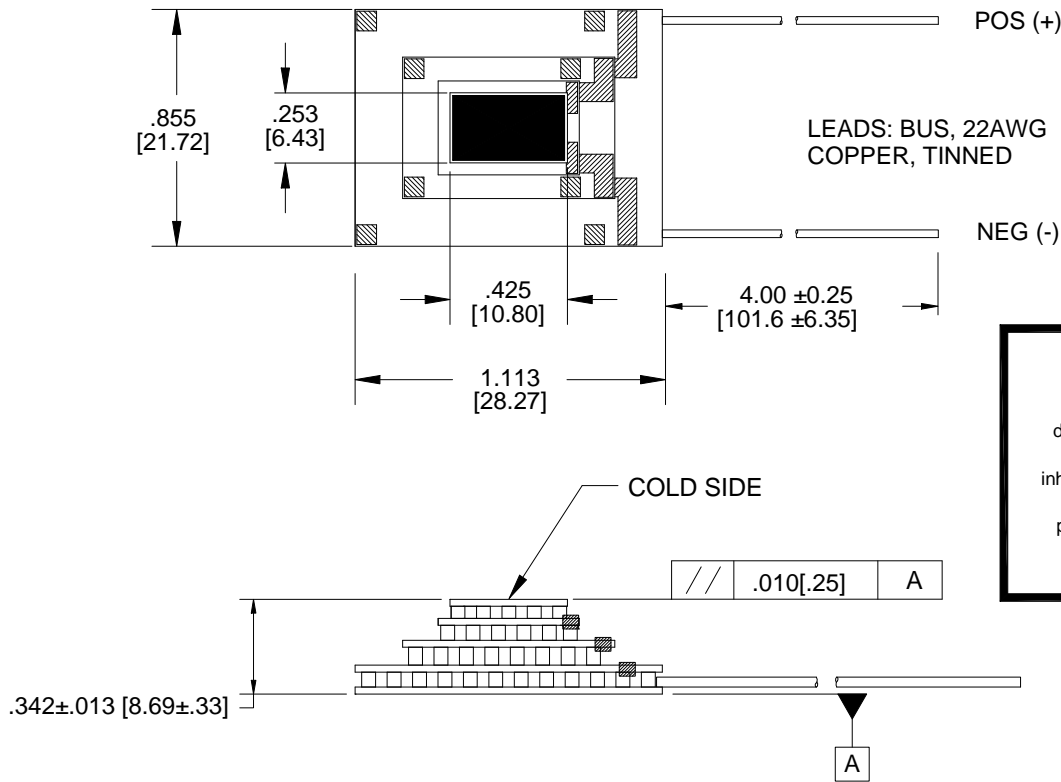
## SP2394

Multi-Stage Thermoelectric Cooler

### TYPICAL PERFORMANCE VALUES

Hot Side Temperature (°C)	27°C	50°C
Δ Tmax (°C - Vacuum):	130	146
Qmax (watts):	4.5	4.9
I <sub>max</sub> (amps):	5.1	5.1
V <sub>max</sub> (vdc):	8.5	9.4
AC Resistance (ohms):	1.56	--

### 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.

marlow industries, inc.

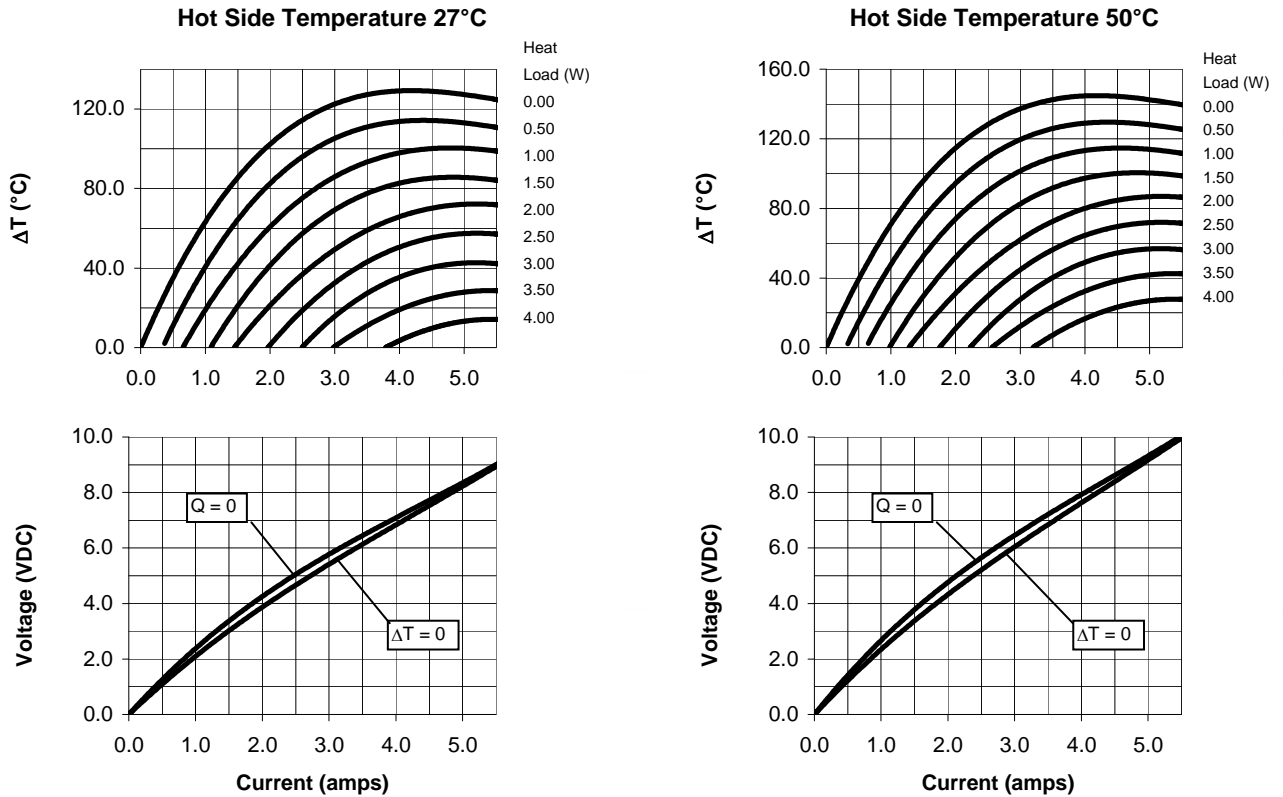
### ORDERING OPTIONS

Model Number	Description
SP2394-01AB	Met Base and Top – cooler is mounted and shipped on test base
SP2394-02AB	Met Base Only – cooler is mounted and shipped on test base
SP2394-03AB	No Met, No Burn In
SP2394-04AB	Met Base Only, No Burn In
SP2394-05AB	Met Base and Top, 117° both sides
SP2394-07AB	Met Base and Top, No Burn In

### PRODUCT FEATURES

- Pretinned metallized ceramic surface(s) with 117°C solder available.
- Elevated temperature burn-in with test data provided.

ENVIRONMENT: VACUUM



For performance information in a vacuum or with hot side temperatures other than 27°C or 50°C, contact one of our Applications Engineers at 877-627-5691.

#### 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 visit our website at [www.marlow.com](http://www.marlow.com).

Marlow Industries, Inc.  
10451 Vista Park Road  
Dallas Texas 75238-1645  
214-340-4900 (tel)  
214-341-5212 (fax)  
877-627-5691 (tech support)  
[www.marlow.com](http://www.marlow.com)

Marlow Industries Europe GmbH  
Brunnenweg 19-21  
64331 Weiterstadt  
Germany  
Tel.: +49 (0) 6150 5439 - 403  
Fax: +49 (0) 6150 5439 - 400  
info@marlow-europe.eu

II-VI Japan Inc.  
WBG Marive East 17F  
2-6 Nakase, Mihama-ku  
Chiba-Shi, Chiba 261-7117  
Japan  
81 43 297 2693 (tel)  
81 43 297 3003 (fax)  
center@ii-vi.co.jp  
[www.ii-vi.co.jp](http://www.ii-vi.co.jp)

II-VI Singapore Pte., Ltd.  
Blk. 5012, Techplace II  
#04-07 & 05-07/12, Ang Mo Kio Ave. 5  
Singapore 569876  
(65) 6481 8215 (tel)  
(65) 6481 8702 (fax)  
info@ii-vi.com.sg  
[www.ii-vi.com.sg](http://www.ii-vi.com.sg)

Marlow Industries China, II-VI  
Technologies Beijing  
A subsidiary of II-VI Incorporated  
Rm 202, 1# Lize 2nd Middle Road  
Wangjing, Chaoyang District  
Beijing 100102 China  
010-64398226 ext 105 (tel)  
010-64399315 (fax)  
info@iivibj.com