



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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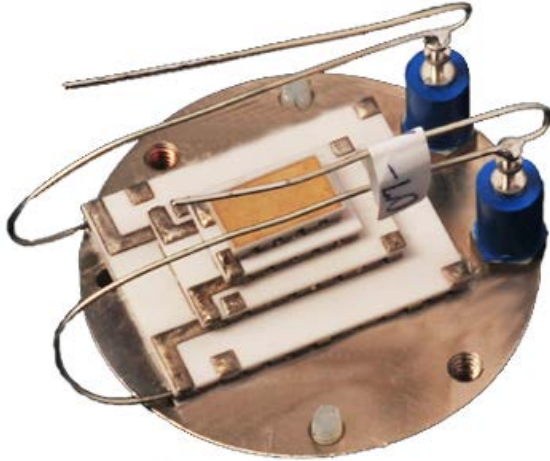
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# Technical Data Sheet for SP2394

## Multi-Stage Thermoelectric Module



### NOMINAL PERFORMANCE IN NITROGEN

Hot Side Temperature (°C)	27	50
$\Delta T_{max}$ (°C):	130	146
Q <sub>max</sub> (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	---

### PRODUCT FEATURES

- Pretinned metallized ceramic surface(s) with 117°C solder available.
- Elevated temperature burn-in with test data provide.
- Ceramic Material: Aluminum Oxide and Beryllium Oxide.

### ORDERING OPTIONS

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

### 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.

### INSTALLATION

Recommended mounting methods: Bonding with thermal epoxy or soldering with metallized ceramics. For additional information, please refer to our TEM Installation Guide.

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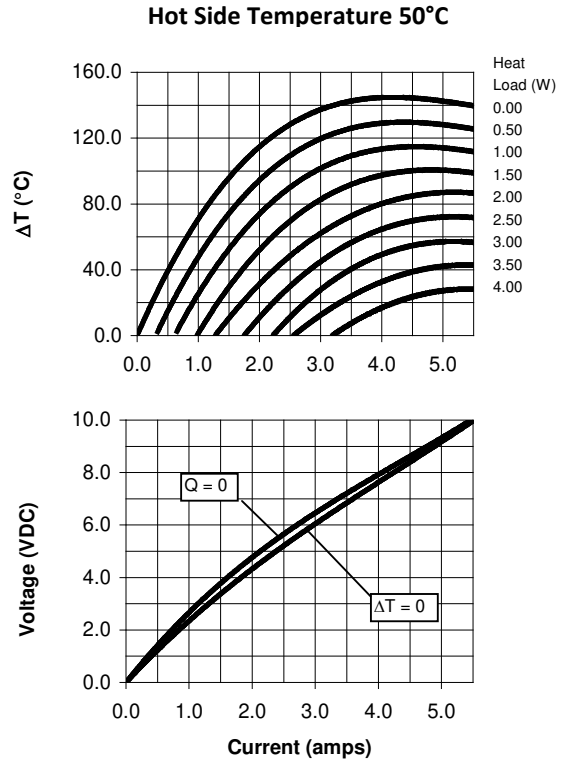
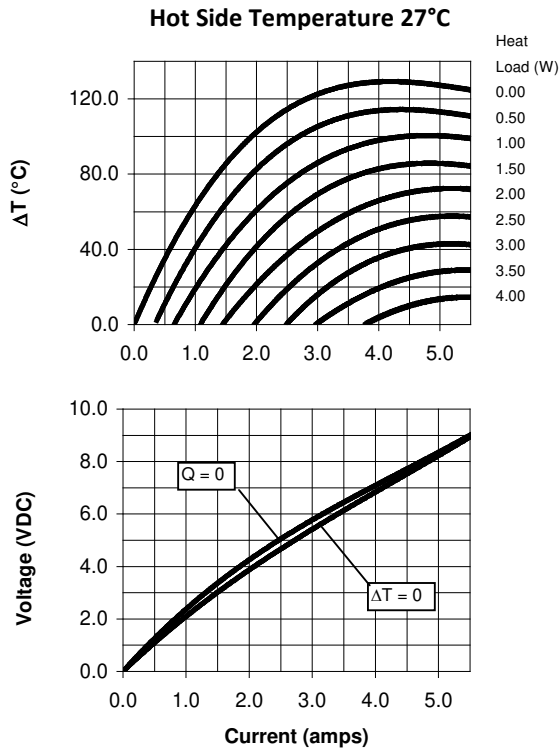
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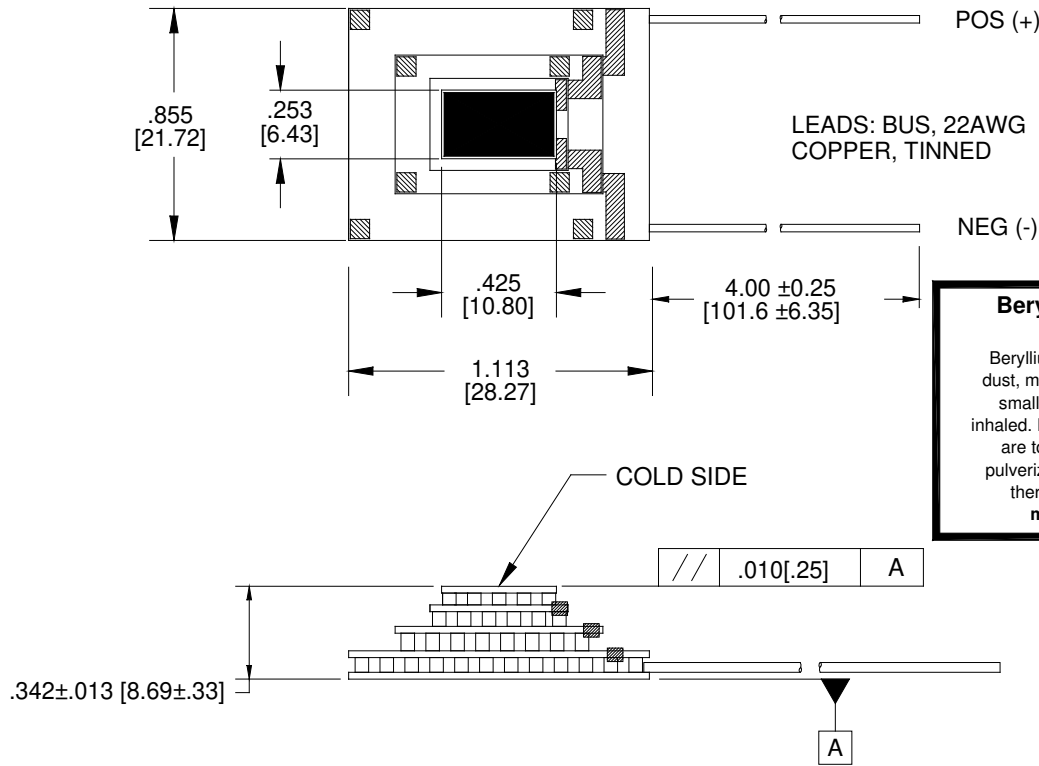
TYPICAL PERFORMANCE CURVES

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.

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.**

All units are in inches. All units in [ ] are in millimeters.

For customer support or general questions please contact a local office or visit our website at [www.marlow.com](http://www.marlow.com). Marlow reserves the right to make product changes without notice.