



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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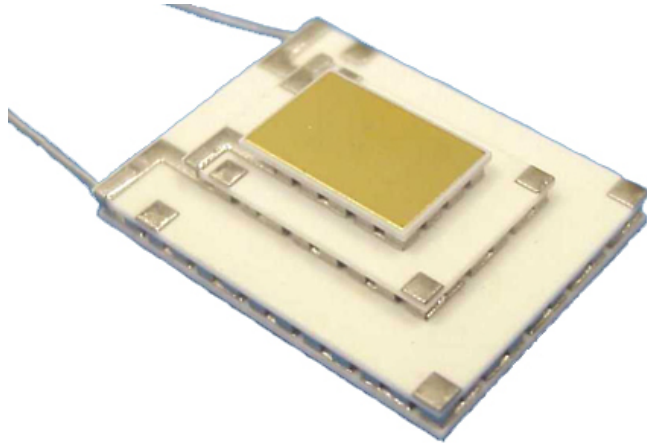
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





Technical Data Sheet for SP2402

Multi-Stage Thermoelectric Module



NOMINAL PERFORMANCE IN NITROGEN

Hot Side Temperature (°C)	27	50
ΔT_{max} (°C):	109	123
Q _{max} (watts):	8.7	9.5
I _{max} (amps):	5.3	5.3
V _{max} (vdc):	8.9	9.9
AC Resistance (ohms):	1.54	---

PRODUCT FEATURES

- RoHS EU Compliant
- Ceramic Material: Aluminum Oxide and Beryllium Oxide.
- Pretinned metallized ceramic surface(s) with 117°C solder.
- Elevated temperature burn-in with test data available.
- -04AB: Special height and parallelism requirements and lead orientation.
- -07AB: Thermistor mounted on edge of cold side ceramic. (Calibration available.)

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
SP2402-07AB	Metallized, Thermocouple

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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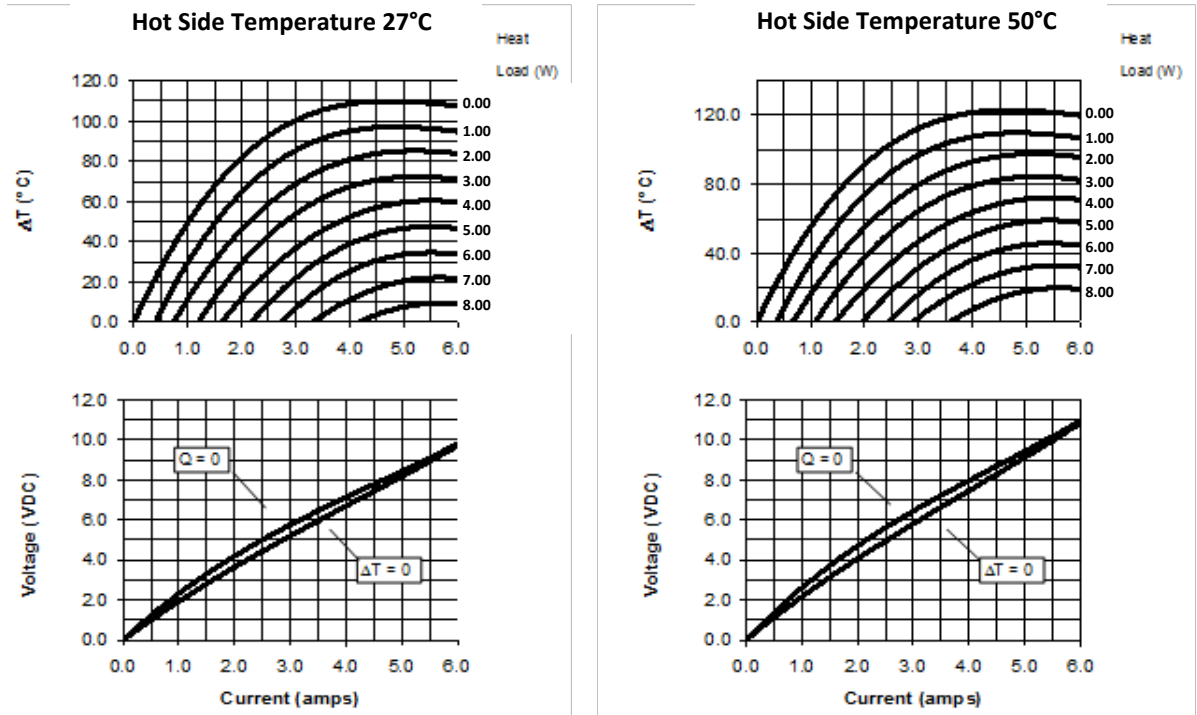
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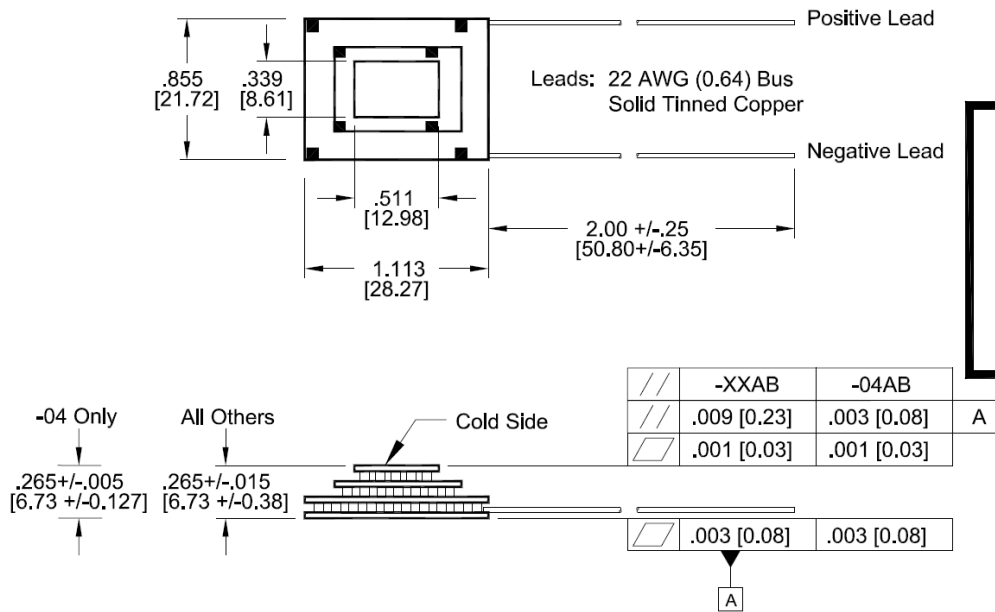
TYPICAL PERFORMANCE CURVES

ENVIRONMENT: ONE ATMOSPHERE DRY NITROGEN



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. Marlow reserves the right to make product changes without notice.