



# Technical Data Sheet for XLT2423

## Single-Stage Thermoelectric Module



### NOMINAL PERFORMANCE IN NITROGEN

Hot Side Temperature (°C)	27	50
$\Delta T_{max}$ (°C):	58	66
Q <sub>max</sub> (watts):	95	106
I <sub>max</sub> (amps):	19.0	18.8
V <sub>max</sub> (vdc):	7.7	8.5
AC Resistance (ohms):	0.34	---

### PRODUCT FEATURES

- RoHS EU Compliant
- Rated operating temperature of 125°C.
- Ceramic Material: Aluminum Oxide
- Designed for temperature cycling applications.
- Capable of rapid heating and cooling rates.
- Porch configuration for high strength leadwire connection.
- Superior nickel diffusion barriers on elements.
- High strength for rugged environment.
- Lapped for multiple module applications.
- Diced option for further mechanical stress relief.
- Set of modules ACR matched available.

### ORDERING OPTIONS

Model Number	Description
XLT2423-31AC	Undiced
XLT2423-34AC	Undiced, ACR matched set of 4
XLT2423-38AC	Undiced, ACR matched set of 8
XLT2423-41AC	Diced
XLT2423-42AC	Diced, ARC matched set of 2
XLT2423-44AC	Diced, ACR matched set of 4
XLT2423-48AC	Diced, ACR matched set of 8
XLT2423-51AC	Undiced, 10 inches long leadwires
XLT2423-61AC	Undiced, plastic tray packaging
XLT2423-71AC	Undiced, no leadwires
XLT2423-78AC	Undiced, ACR matched set of 8, no leadwires
XLT2423-81AC	Diced, no leadwires
XLT2423-88AC	Diced, ACR matched set of 8, no leadwires
XLT2423-98AC	Diced, ACR matched set of 8, 2.12 inches long leadwires

### OPERATION CAUTIONS

For maximum reliability, storage and operation below 125°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 method: Clamp with uniform pressure to a flat surface with thermal interface material. For additional information, please refer to our TEC Installation Guide.

II-VI Marlow – Dallas, TX USA  
214-340-4900  
877-627-5691  
marlow.sales@ii-vi.com

Marlow Industries Europe  
GmbH - Germany  
+49 (0) 6150 5439 - 403  
info@marlow-europe.eu

II-VI Japan Inc.  
81 43 297 2693 (tel)  
center@ii-vi.co.jp  
www.ii-vi.co.jp

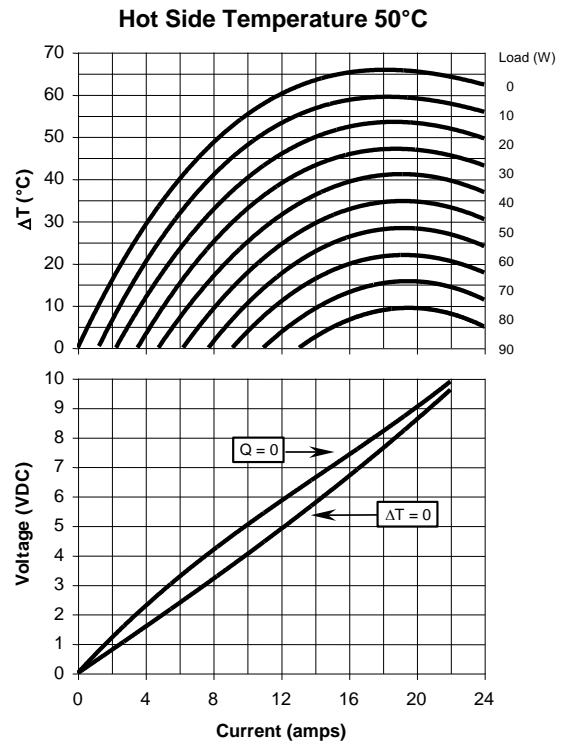
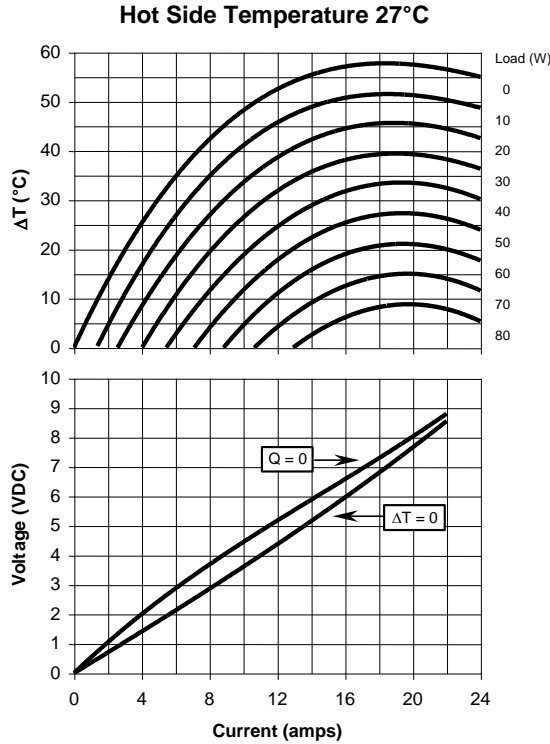
II-VI Singapore Pte., Ltd.  
(65) 6481 8215 (tel)  
info@ii-vi.com.sg

Marlow Industries China, II-VI  
Technologies Beijing  
86-10-643 98226  
info@iivibj.com



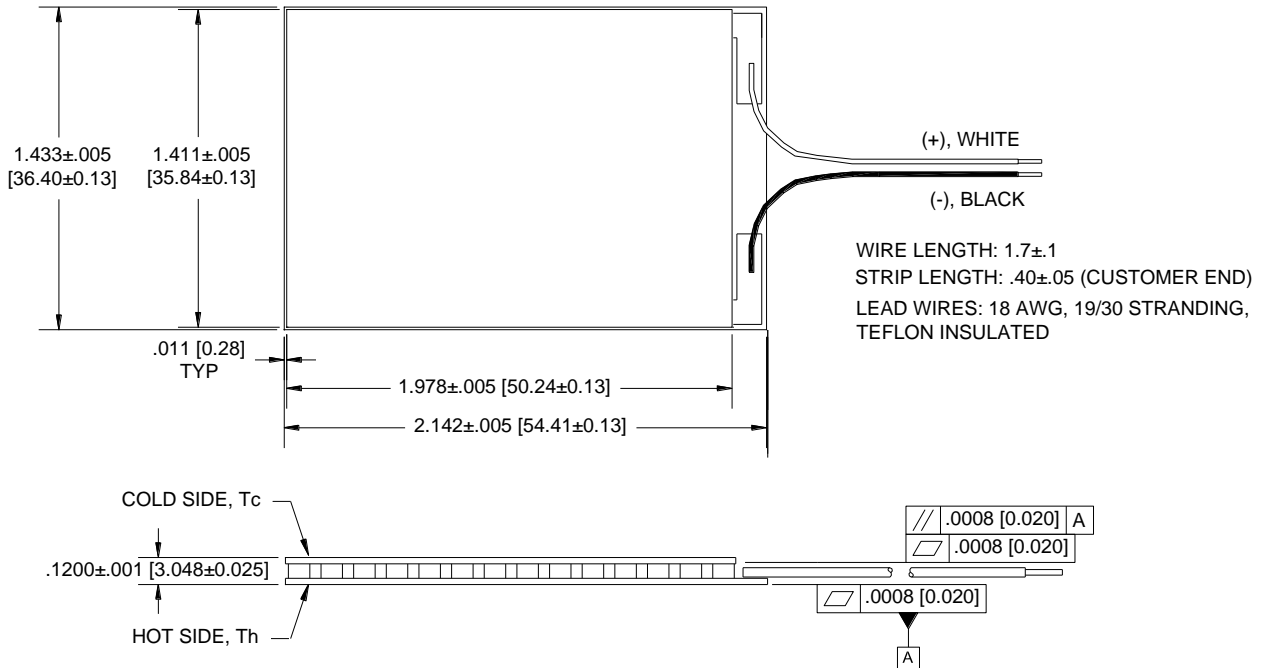
TYPICAL PERFORMANCE CURVES

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



Dimensions in [ ] are 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.