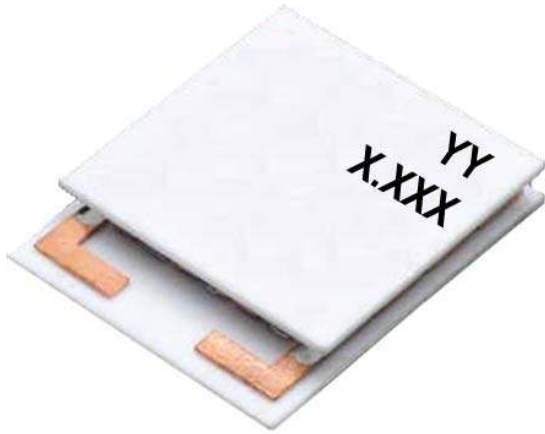




# Technical Data Sheet for XLT3-8

## Single-Stage Thermoelectric Module



### NOMINAL PERFORMANCE IN NITROGEN

Hot Side Temperature (°C)	27	50
$\Delta T_{max}$ (°C):	64	72
Q <sub>max</sub> (watts):	16.9	18.7
I <sub>max</sub> (amps):	7.4	7.3
V <sub>max</sub> (vdc):	3.5	3.9
AC Resistance (ohms):	.40	---

### 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.
- RTV sealing option available.
- Lapped option available for multiple module applications.
- Set of modules ACR matched available.

### ORDERING OPTIONS

Model Number	Description
XLT3-8-01	Leadwires
XLT3-8-01L	Leadwires, Lapped
XLT3-8-01S	Leadwires, Sealed
XLT3-8-01LS	Leadwires, Lapped, Sealed
XLT3-8-14LS	Leadwires, Lapped, Sealed Set of 4 ACR Matched

### 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 TEM 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

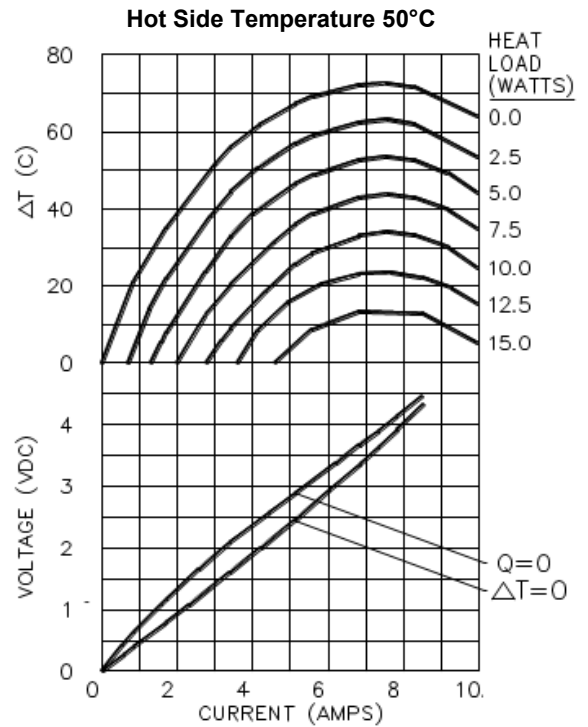
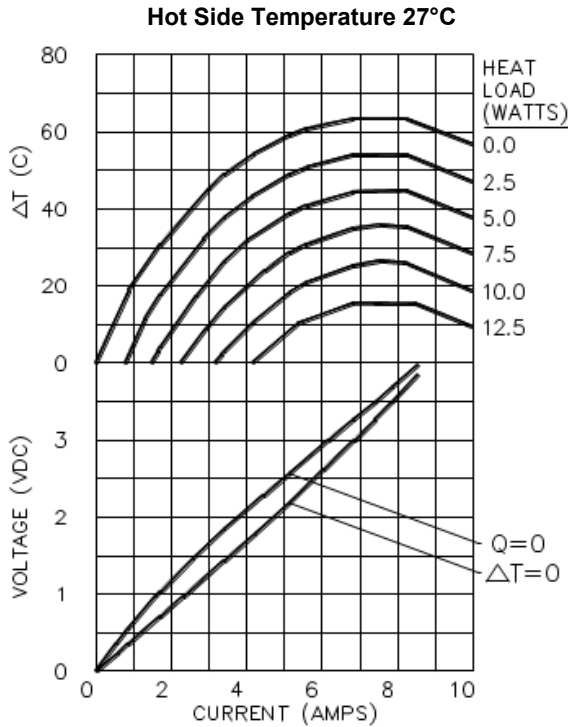
II-VI Singapore Pte., Ltd.  
(65) 6481 8215 (tel)  
info@ii-vi.com.sg

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



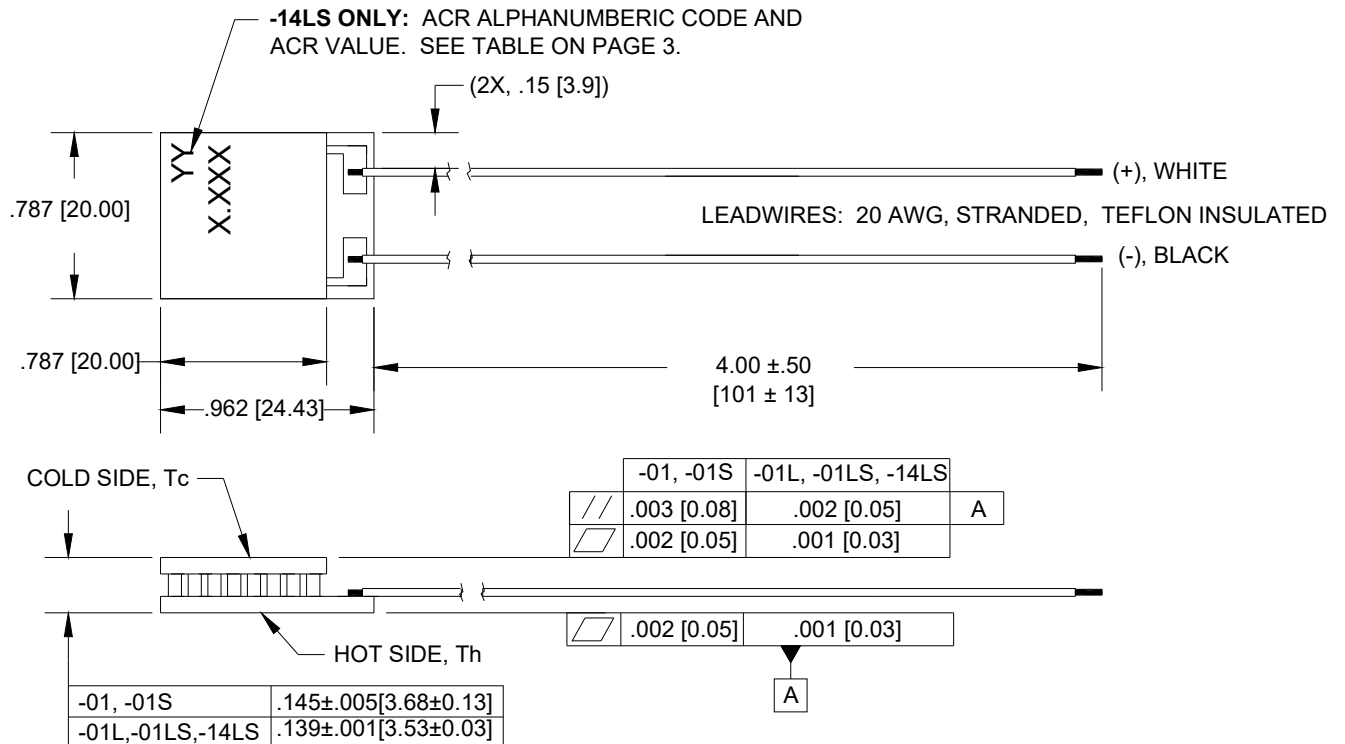
TYPICAL PERFORMANCE CURVES

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



All units are in inches. 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.



<b>XLT3-8-14LS ACR Matching Table at 23.0±0.5°C</b>			
Alphanumeric Code	ACR (ohms)		
	Greater Than	Less Than or Equal to	Matching Range (max-min)
A0	0.350	0.360	0.010
A1	0.360	0.370	0.010
A2	0.370	0.380	0.010
A3	0.380	0.390	0.010
A4	0.390	0.400	0.010
A5	0.400	0.410	0.010
A6	0.410	0.420	0.010
A7	0.420	0.430	0.010
A8	0.430	0.440	0.010
A9	0.440	0.444	0.004

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.