



# Technical Data Sheet for XLT2418

## Single-Stage Thermoelectric Module



### NOMINAL PERFORMANCE IN NITROGEN

Hot Side Temperature (°C)	27	50
$\Delta T_{max}$ (°C):	56.5	64.0
Q <sub>max</sub> (watts):	127	141
I <sub>max</sub> (amps):	13.9	13.8
V <sub>max</sub> (vdc):	14.1	15.7
AC Resistance (ohms):	0.83	---

### 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 for multiple module applications.
- Diced option for further mechanical stress relief.
- Set of modules ACR matched available.

### ORDERING OPTIONS

Model Number	Description
XLT2418-03AC	Leadwires
XLT2418-04AC	No Leadwires
XLT2418-05AC	Leadwires, Sealed
XLT2418-06AC	Leadwires, Diced, 64 sections
XLT2418-07AC	No Leadwires, Sealed
XLT2418-08AC	Leadwire pad and TEC Sealed
XLT2418-36AC	Leadwires, Sealed, Six Coolers, ACR matched set

### 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.

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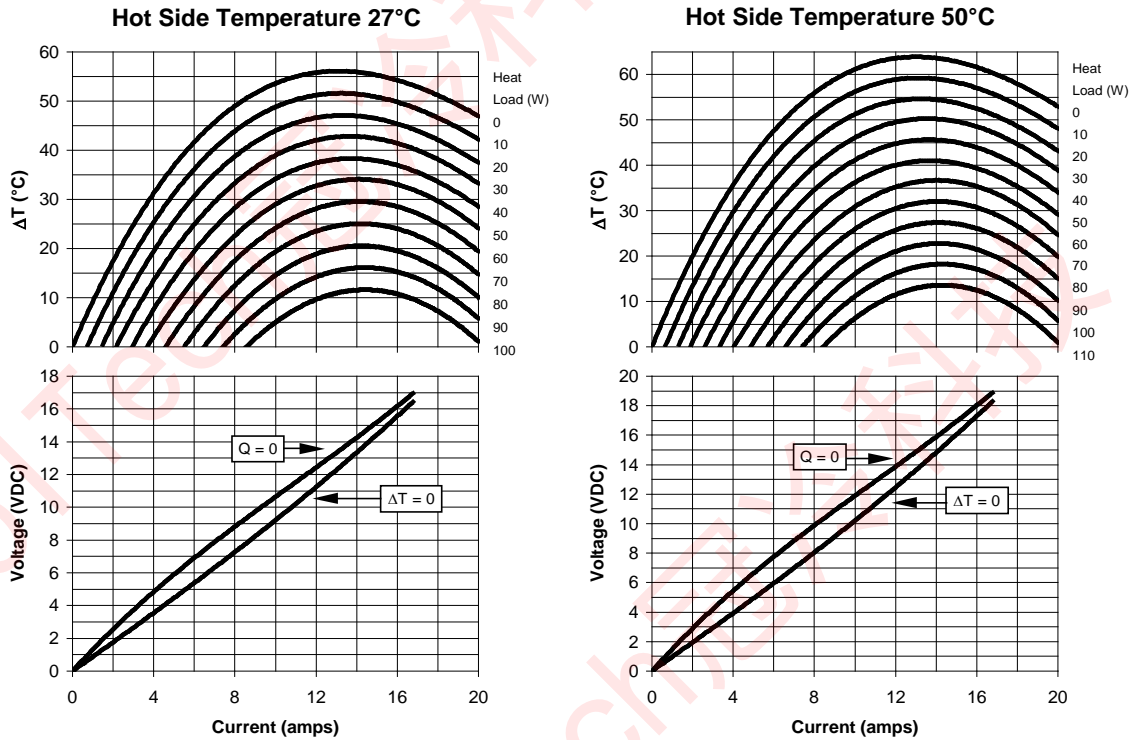
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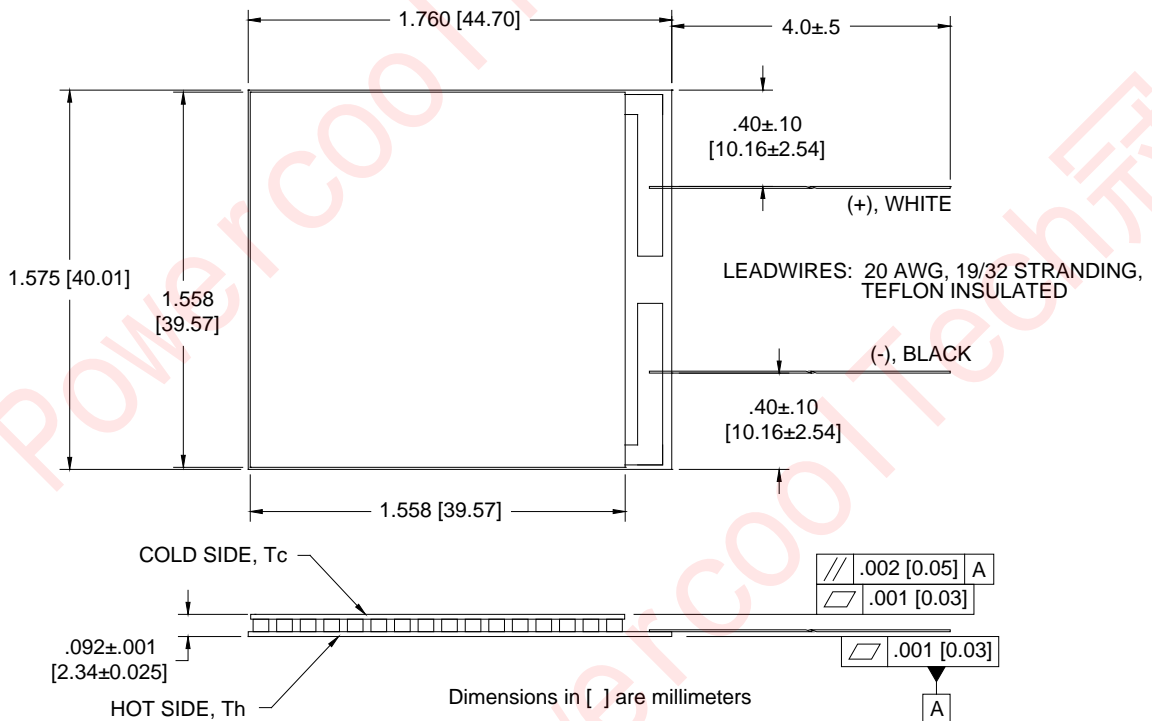
## TYPICAL PERFORMANCE CURVES

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



For customer support or general questions please contact a local office or visit our website at [www.marlow.com](http://www.marlow.com).