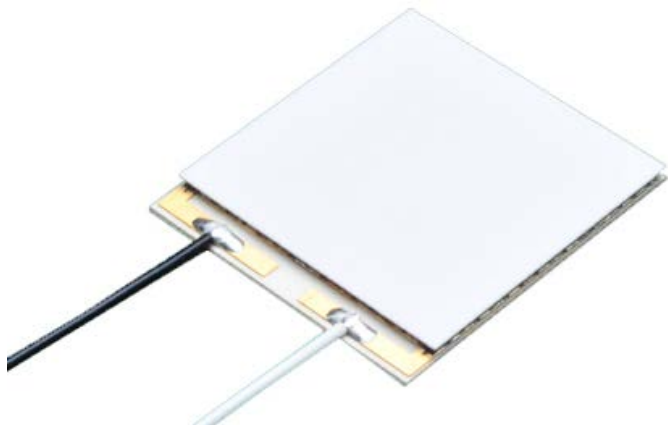




# Technical Data Sheet for XLT2418

## Single-Stage Thermoelectric Module



### NOMINAL PERFORMANCE IN NITROGEN

|                           |      |      |
|---------------------------|------|------|
| Hot Side Temperature (°C) | 27   | 50   |
| $\Delta T_{max}$ (°C):    | 56.5 | 64.0 |
| $Q_{max}$ (watts):        | 127  | 141  |
| $I_{max}$ (amps):         | 13.9 | 13.8 |
| $V_{max}$ (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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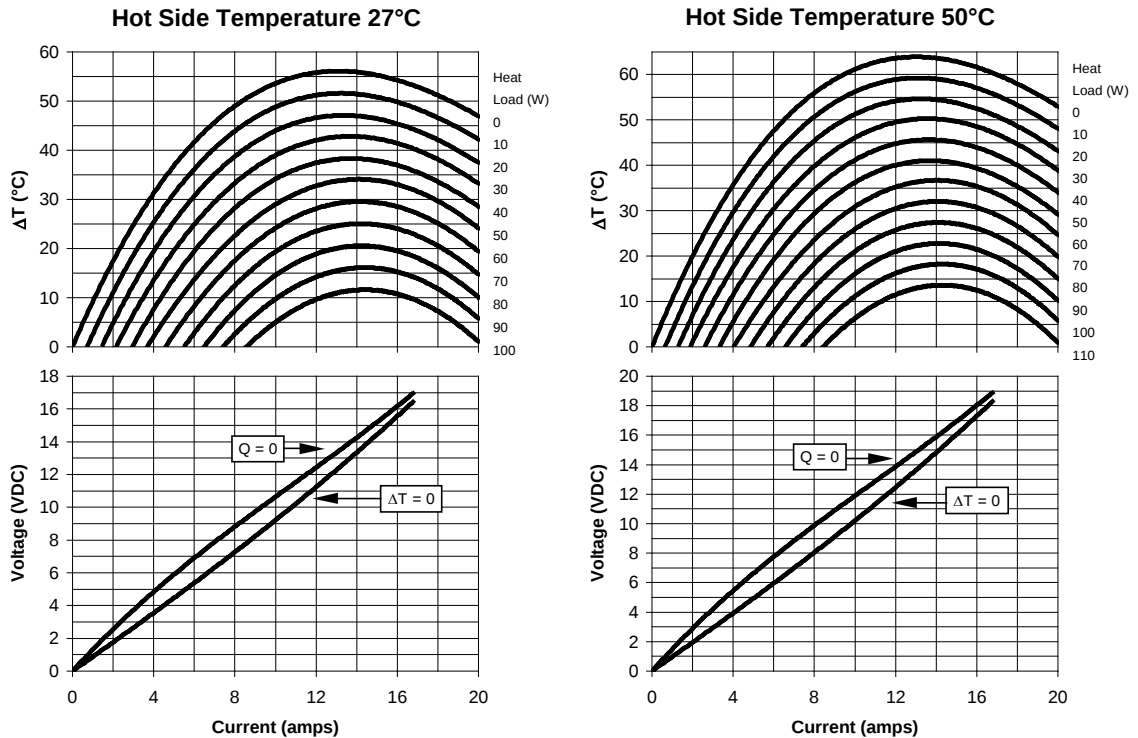
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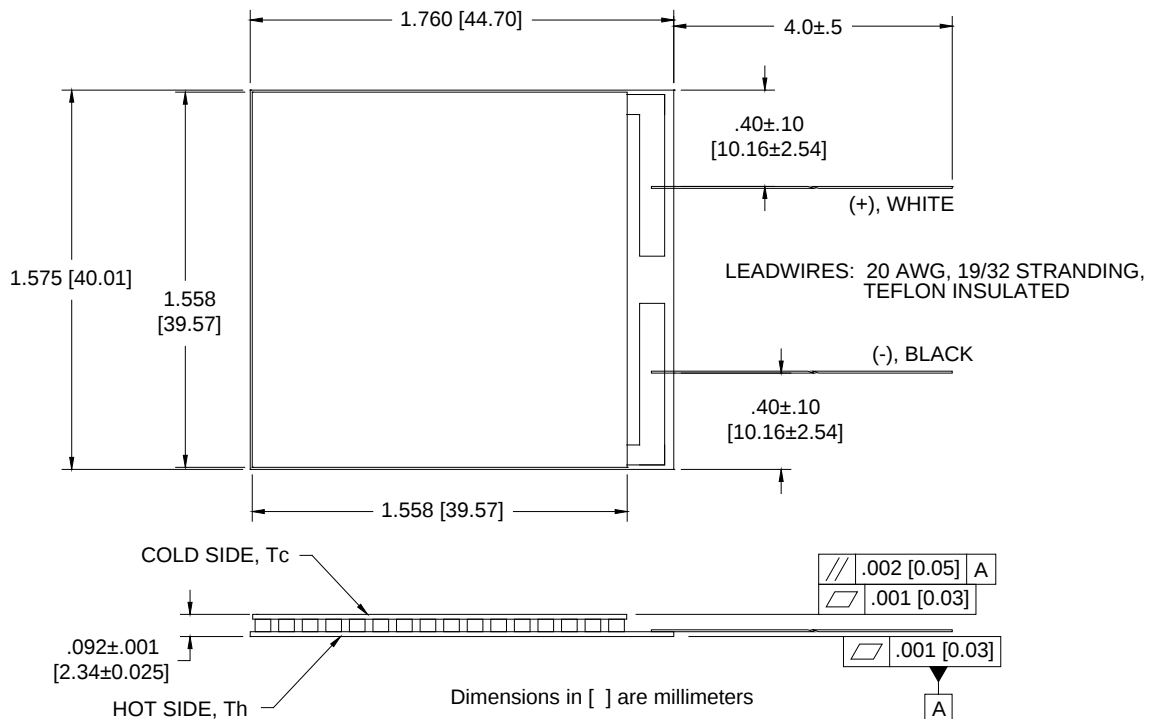
## TYPICAL PERFORMANCE CURVES

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).