



# Technical Data Sheet for XLT2427

## Single-Stage Thermoelectric Module



### NOMINAL PERFORMANCE IN NITROGEN

|                           |      |      |
|---------------------------|------|------|
| Hot Side Temperature (°C) | 27   | 50   |
| $\Delta T_{max}$ (°C):    | 53   | 62   |
| Q <sub>max</sub> (watts): | 76   | 86   |
| I <sub>max</sub> (amps):  | 7.5  | 7.5  |
| V <sub>max</sub> (vdc):   | 15.8 | 17.5 |
| AC Resistance (ohms):     | 1.66 | ---  |

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

### ORDERING OPTIONS

| Model Number    | Description                                 |
|-----------------|---|
| XLT2427-03AC    | Leadwires, Lapped                           |
| XLT2427-03AC-31 | Leadwires, Lapped, Sealed                   |
| XLT2427-04AC    | Lapped, without Leadwires                   |
| XLT2427-36AC    | Leadwires, Lapped, ACR Matched set of 6 TEC |

### 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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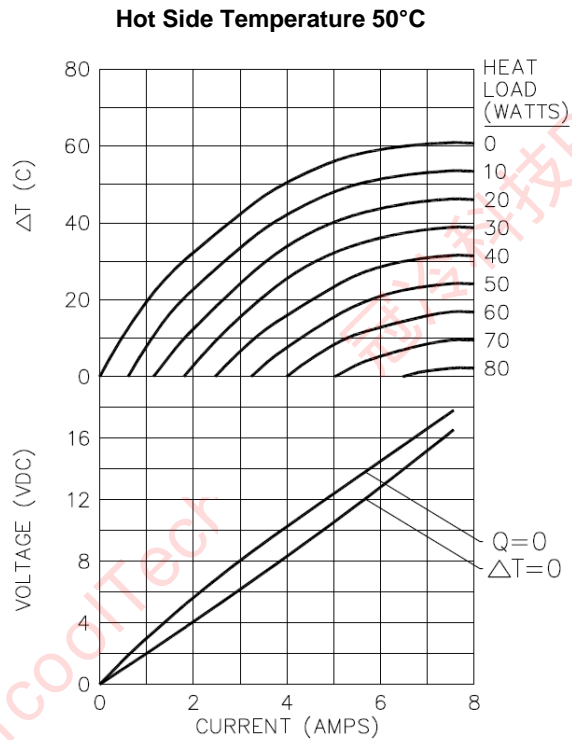
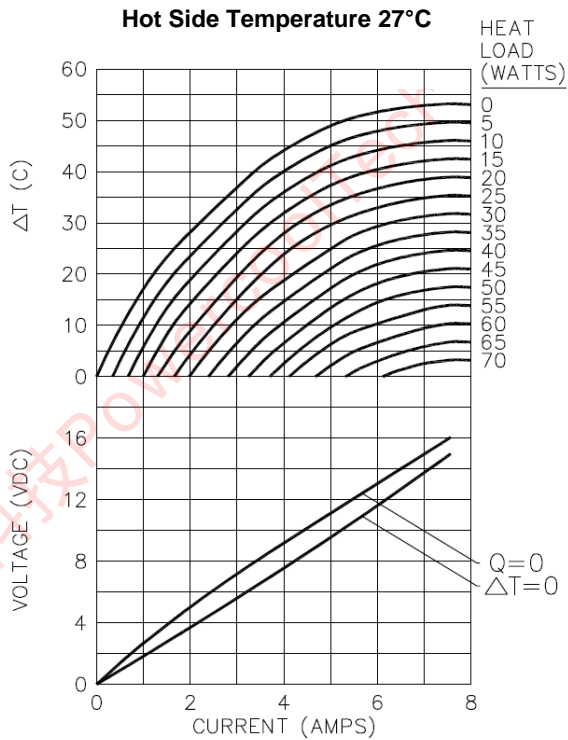
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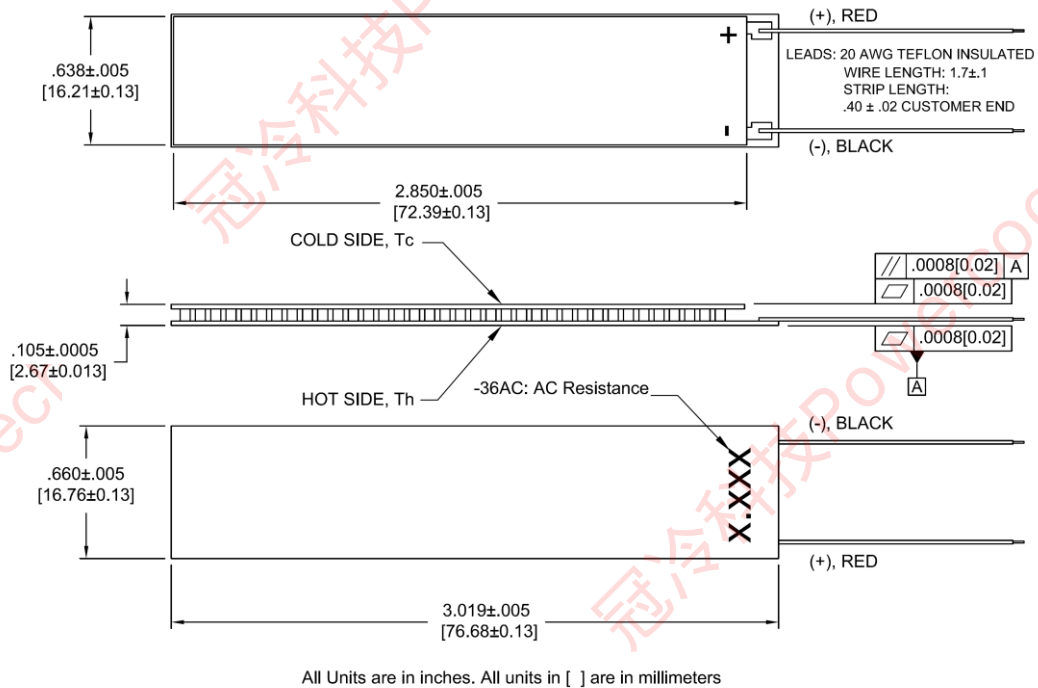
## TYPICAL PERFORMANCE CURVES

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