



Technical Data Sheet for XLT2423

Single-Stage Thermoelectric Module



NOMINAL PERFORMANCE IN NITROGEN

| | | |
|---------------------------|------|------|
| Hot Side Temperature (°C) | 27 | 50 |
| ΔT_{max} (°C): | 58 | 66 |
| Q _{max} (watts): | 95 | 106 |
| I _{max} (amps): | 19.0 | 18.8 |
| V _{max} (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.

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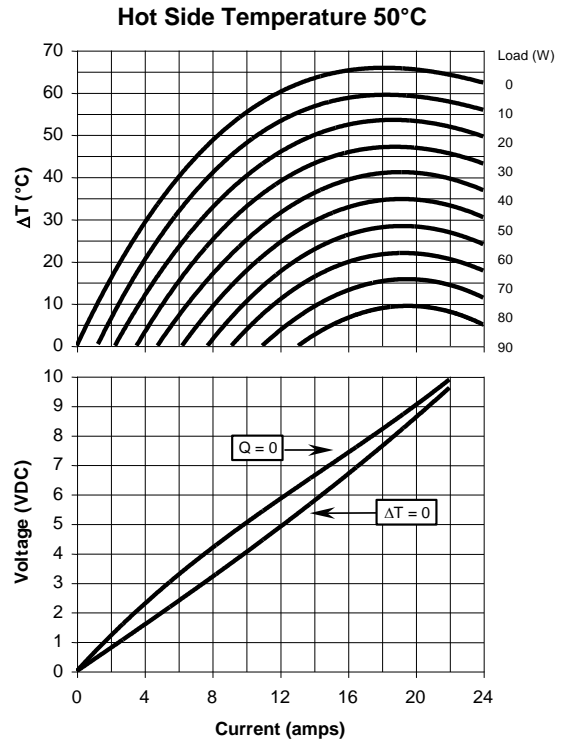
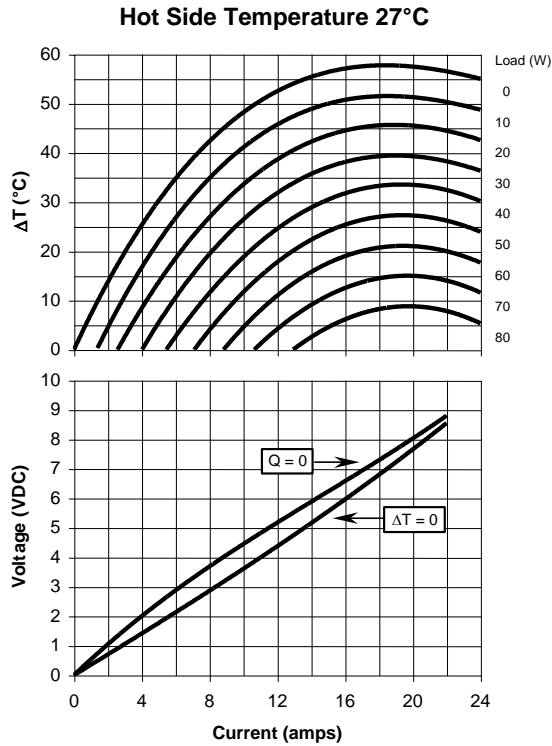
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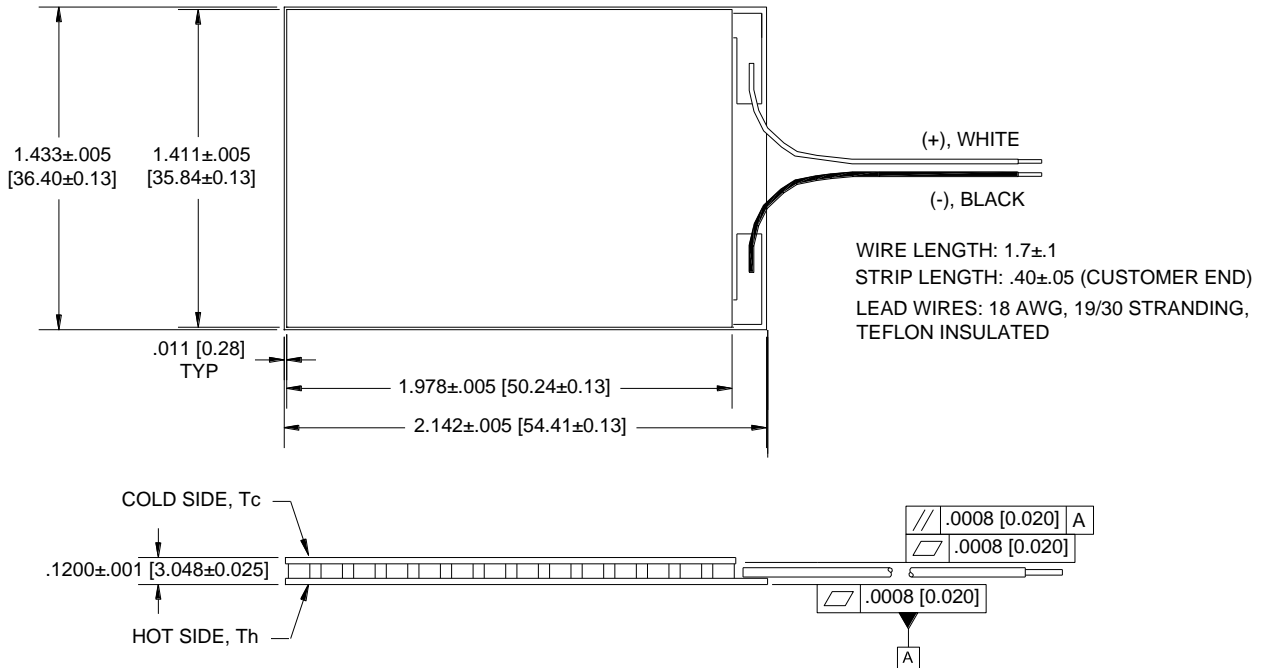
TYPICAL PERFORMANCE CURVES

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



Dimensions in [] are millimeters

For customer support or general questions please contact a local office or visit our website at www.marlow.com.
Marlow reserves the right to make product changes without notice.