

THERMOCYCLER XLT2423

Single-Stage Thermoelectric Module



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

Nominal Performance in Nitrogen

| | | |
|---------------------------|------|------|
| Hot Side Temperature (°C) | 27 | 50 |
| Δ Tmax (°C) | 58 | 66 |
| Qmax (watts) | 95 | 106 |
| I _{max} (amps) | 19.0 | 18.8 |
| V _{max} (vdc) | 7.7 | 8.5 |
| AC Resistance (ohms) | 0.34 | -- |

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

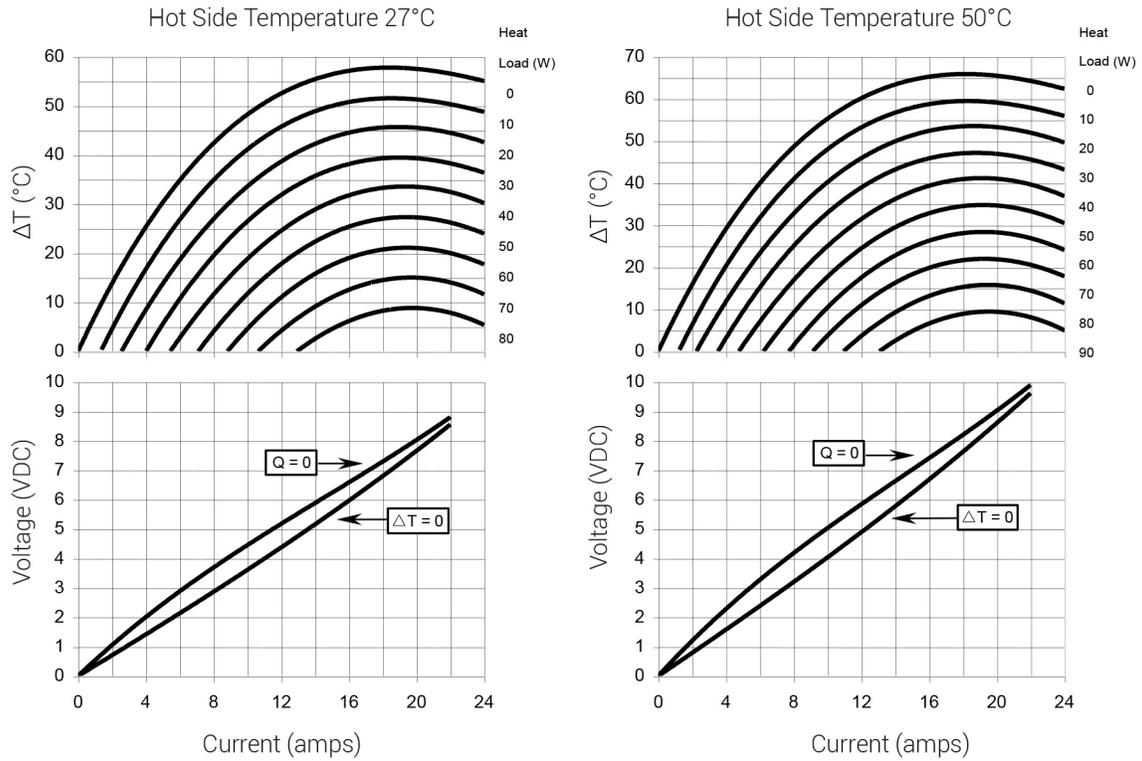
For maximum reliability, storage and operation below 125°C in a non-condensing environment is recommended. To minimize thermal stress, use linear/proportional temperature control or a similar method rather than an ON/OFF method.

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.

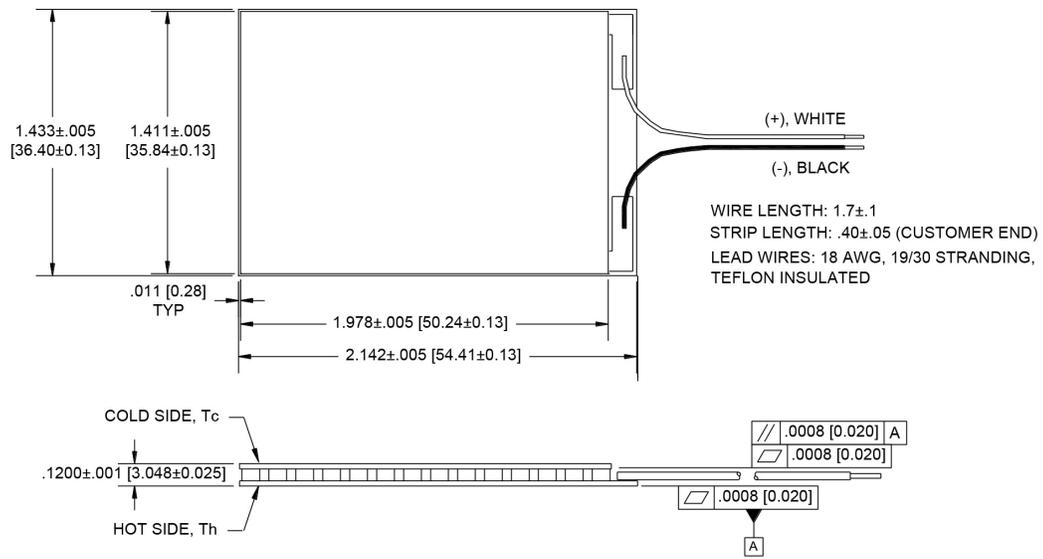
Typical Performance Curves

Environment: One atmosphere dry nitrogen



For performance information in a vacuum or with hot side temperatures other than 27°C or 50°C, please contact us.

Mechanical Characteristics



Dimensions in [] are millimeters