THERMOCYCLER XLT2418

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
- RTV sealing option available
- 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 |
|---------------------------|------|------|
| ∆ Tmax (°C) | 56.5 | 64.0 |
| Qmax (watts) | 127 | 141 |
| lmax (amps) | 13.9 | 13.8 |
| Vmax (vdc) | 14.1 | 15.7 |
| AC Resistance (ohms) | 0.83 | |

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 |

Typical Performance Curves

Environment: One atmosphere dry nitrogen

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.



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

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Mechanical Characteristics



Dimensions in [] are millimeters

