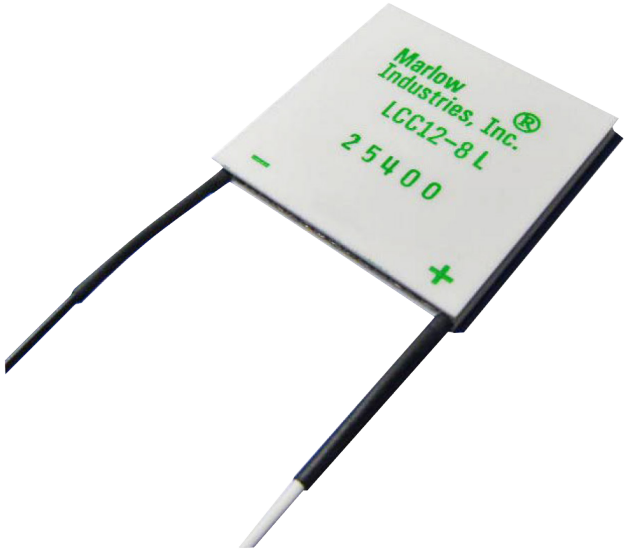
# THERMOCYCLER LCC12-8

## Single-Stage Thermoelectric Module




## FEATURES

- RoHS EU Compliant
- Rated operating temperature of 130°C
- Ceramic Material: Aluminum Oxide
- Designed for temperature cycling applications
- Porchless configuration for reduced footprint
- Superior nickel diffusion barriers on elements
- High strength for rugged environment
- RTV sealing option available
- Lapped option available for multiple module
- applications
- ACR Matched Set using Alphanumeric code
- available (see page 3)

COHERENT

### Nominal Performance in Nitrogen

| | | |
|---|---|---|
| Hot Side Temperature (°C) | 27 | 50 |
| Δ Tmax (°C) | 66 | 74 |
| Qmax (watts) | 71 | 78 |
| Imax (amps) | 7.4 | 7.4 |
| Vmax (vdc) | 14.7 | 16.4 |
| AC Resistance (ohms) | 1.6 | -- |

### Ordering Options

| Model Number | Description |
|---|---|
| LCC12-8-01 | Leadwires |
| LCC12-8-01L | Leadwires, Lapped |
| LCC12-8-01S | Leadwires, Sealed |
| LCC12-8-01LS | Leadwires, Lapped, Sealed |
| LCC12-8-16LS | Leadwires, Lapped, Sealed, ACR Matched set of 6 |

### Operation Cautions

For maximum reliability, storage and operation below 130°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.

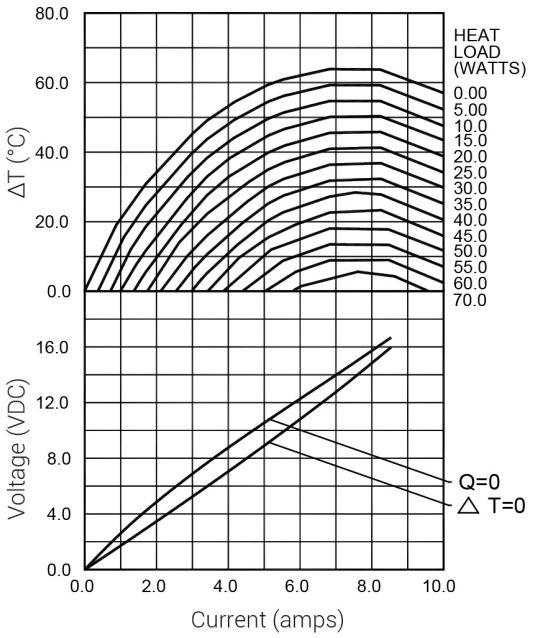
### Installation

Recommended mounting methods: Clamp with uniform pressure to a flat surface with thermal interface material. For additional information, please refer to our TEC Installation Guide.

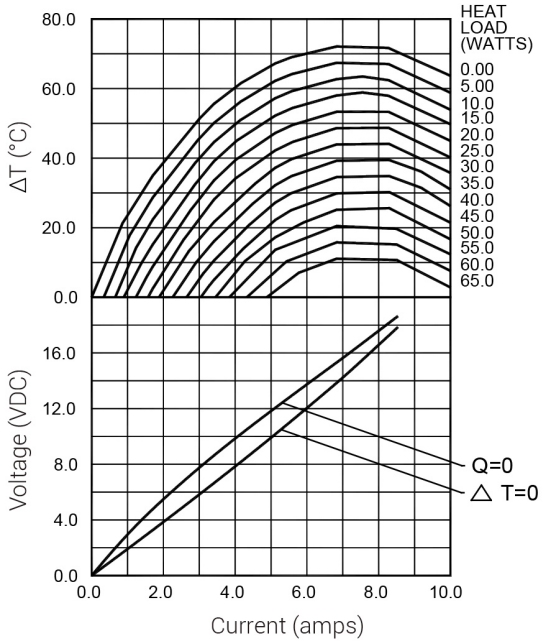
### Typical Performance Curves

Environment: One atmosphere dry nitrogen

Hot Side Temperature 27°C

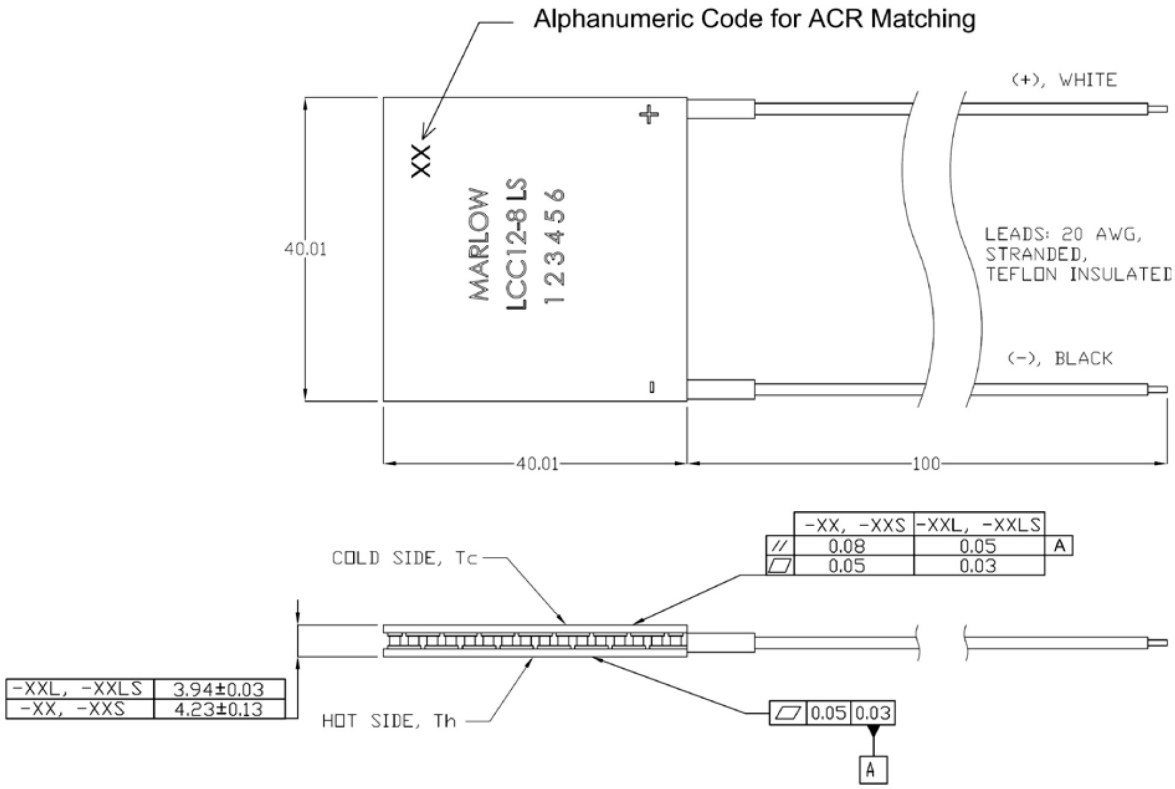



Hot Side Temperature 50°C




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

**Mechanical Characteristics**




All dimensions are in millimeters unless otherwise stated.

| ACR Specification @ 23°C | | | |
|---|---|---|---|
| | Min (ohms) | Max (ohms) | Matching Range (max - min) |
| | 1.450 | 1.780 | 0.010 |

| LCC12-8 ACR Matching Table | | | |
|---|---|---|---|
| Alphanumeric Code | ACR (ohms) | | |
| | Greater than | Less than or equal to | Matching Range (max - min) |
| A0 | 1.450 | 1.460 | 0.010 |
| A1 | 1.460 | 1.470 | 0.010 |
| A2 | 1.470 | 1.480 | 0.010 |
| A3 | 1.480 | 1.490 | 0.010 |
| A4 | 1.490 | 1.500 | 0.010 |
| A5 | 1.500 | 1.510 | 0.010 |
| A6 | 1.510 | 1.520 | 0.010 |
| A7 | 1.520 | 1.530 | 0.010 |
| A8 | 1.530 | 1.540 | 0.010 |
| A9 | 1.540 | 1.550 | 0.010 |
| B0 | 1.550 | 1.560 | 0.010 |
| B1 | 1.560 | 1.570 | 0.010 |
| B2 | 1.570 | 1.580 | 0.010 |
| B3 | 1.580 | 1.590 | 0.010 |
| B4 | 1.590 | 1.600 | 0.010 |
| B5 | 1.600 | 1.610 | 0.010 |
| B6 | 1.610 | 1.620 | 0.010 |
| B7 | 1.620 | 1.630 | 0.010 |
| B8 | 1.630 | 1.640 | 0.010 |
| B9 | 1.640 | 1.650 | 0.010 |
| C0 | 1.650 | 1.660 | 0.010 |
| C1 | 1.660 | 1.670 | 0.010 |
| C2 | 1.670 | 1.680 | 0.010 |
| C3 | 1.680 | 1.690 | 0.010 |
| C4 | 1.690 | 1.700 | 0.010 |
| C5 | 1.700 | 1.710 | 0.010 |
| C6 | 1.710 | 1.720 | 0.010 |
| C7 | 1.720 | 1.730 | 0.010 |
| C8 | 1.730 | 1.740 | 0.010 |
| C9 | 1.740 | 1.750 | 0.010 |
| D1 | 1.750 | 1.760 | 0.010 |
| D2 | 1.760 | 1.770 | 0.010 |
| D3 | 1.770 | 1.780 | 0.010 |



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