

# Thermoelectric Cooler RC12-8

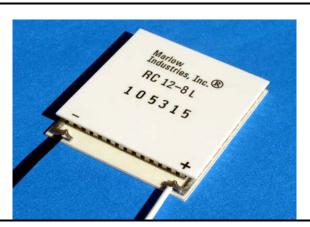
marlow

**industries** Subsidiary of II-VI Incorporated

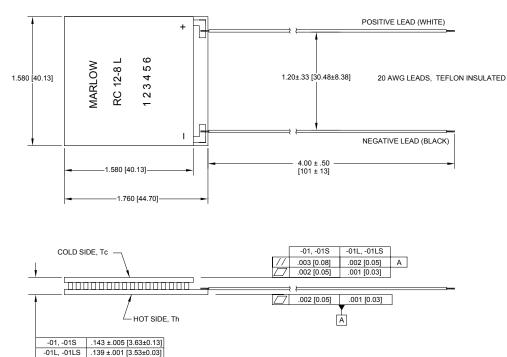
# RoHS 2002/95/EC Compliant

## Performance Values

| Hot Side Temperature<br>(°C)            | 27°C | 50°C |
|-----------------------------------------|------|------|
| $\Delta$ Tmax (°C-dry N <sub>2</sub> ): | 66   | 74   |
| Qmax (watts):                           | 71   | 78   |
| Imax (amps):                            | 7.4  | 7.4  |
| Vmax (vdc):                             | 14.7 | 16.4 |
| AC Resistance<br>(ohms):                | 1.6  |      |



## **Mechanical Characteristics**



## Ordering Options

| Model Number | Description                |
|--------------|----------------------------|
| RC12-8-01    | Base Model w/ leads        |
| RC12-8-01L   | Lapped Model               |
| RC12-8-01S   | Sealed Model               |
| RC12-8-01LS  | Lapped and Sealed<br>Model |

## Features

Dimensions in [ ] are millimeters

Ceramic Material: Alumina (AC)

#### • RoHS 2002/95/EC compliant

- Solid-state reliability.
- Built with high temperature solder with the ability to withstand higher assembly processing temperatures for short periods of time (<160°C).</li>
- Superior nickel diffusion barriers on elements
- High strength for rugged environment.
- Porched configuration for enhanced leadwire strength
- RTV sealing available (Optional)
- Lapped option available for multiple module applications.



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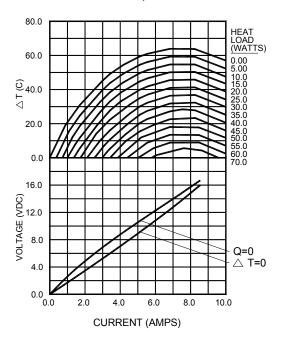
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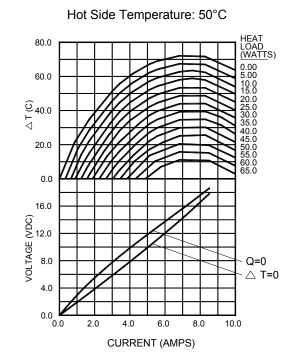


## Performance Curves

Environment: One atmosphere dry nitrogen

Hot Side Temperature: 27°C





For performance information in a vacuum or with hot side temperatures other than 27°C or 50°C, consult one of our Applications Engineers.

## Installation

Recommended mounting methods: Bonding with thermal epoxy or soldering with metallized ceramics. For additional information, please refer to our TEC Installation Guide.

## **Operation Cautions**

For maximum reliability, storage and operation below 85°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.

## Addresses

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