

marlow industries

Subsidiary of II-VI Incorporated

a global leader in thermoelectric solutions

Thermoelectric Cooler RC12-4

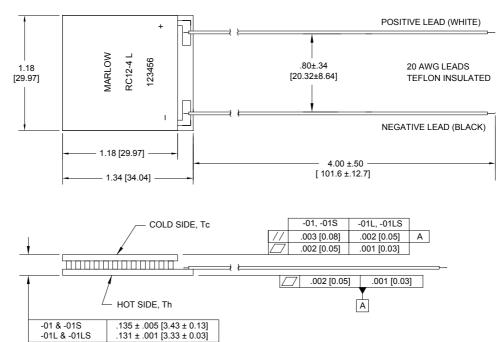
RoHS 2002/95/EC Compliant

Performance Values

Hot Side Temperature (°C)	27°C	50°C
Δ Tmax (°C-dry N ₂):	66	74
Qmax (watts):	36	39
Imax (amps):	3.7	3.7
Vmax (vdc):	14.7	16.4
AC Resistance (ohms):	3.2	

Imathem RC 12-41 10 5 3 1 5

Mechanical Characteristics



Ceramic Material: Alumina (AC)

Dimensions in [] are millimeters

Ordering Options

Model Number	Description
RC12-4-01	Base Model w/ leads
RC12-4-01L	Lapped Model
RC12-4-01S	Sealed Model
RC12-4-01LS	Lapped and Sealed Model

Features

• 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).
- 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.



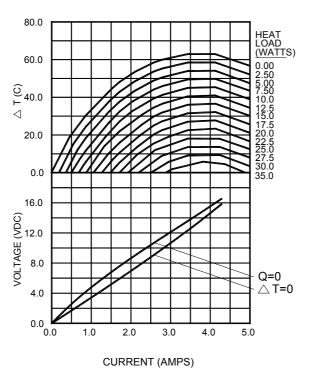


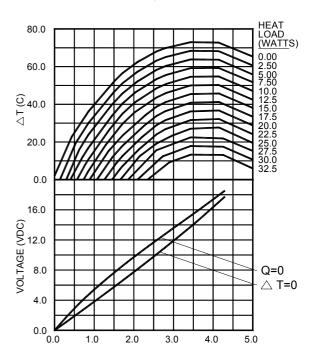
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Performance Curves

Environment: One atmosphere dry nitrogen

Hot Side Temperature: 27°C





Hot Side Temperature: 50°C

CURRENT (AMPS)

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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