marlow industries, inc. ®
Subsidiary of II-VI INCORPORATED

TECHNICAL DATA SHEET

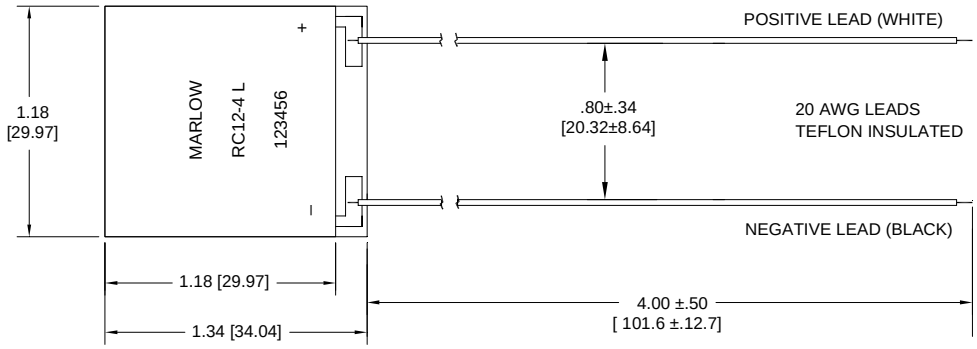
RC12-4

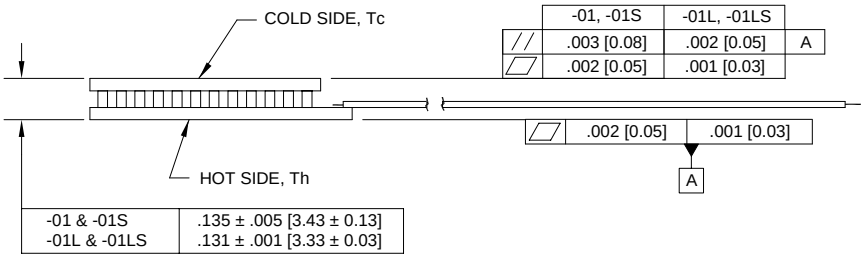
Single-Stage Thermoelectric Cooler
RoHS 2002/95/EC Compliant

PERFORMANCE VALUES

	27°C	50°C
Hot Side Temperature (°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	---

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

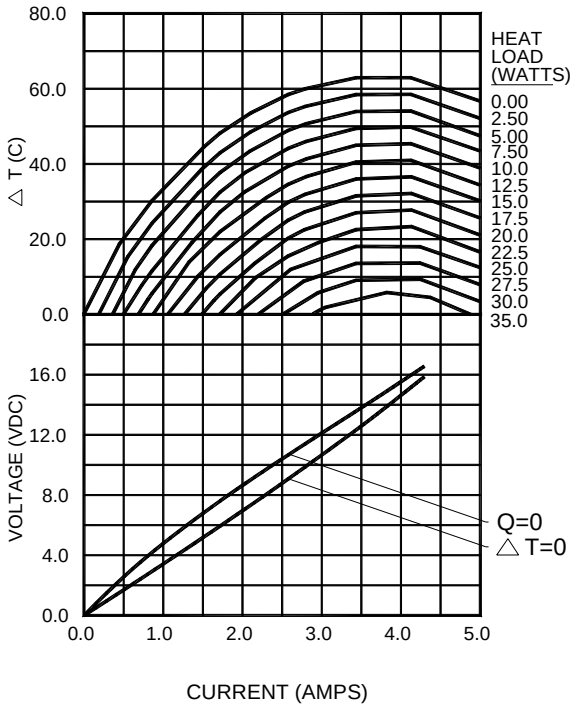
AVAILABLE MODIFICATIONS

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.

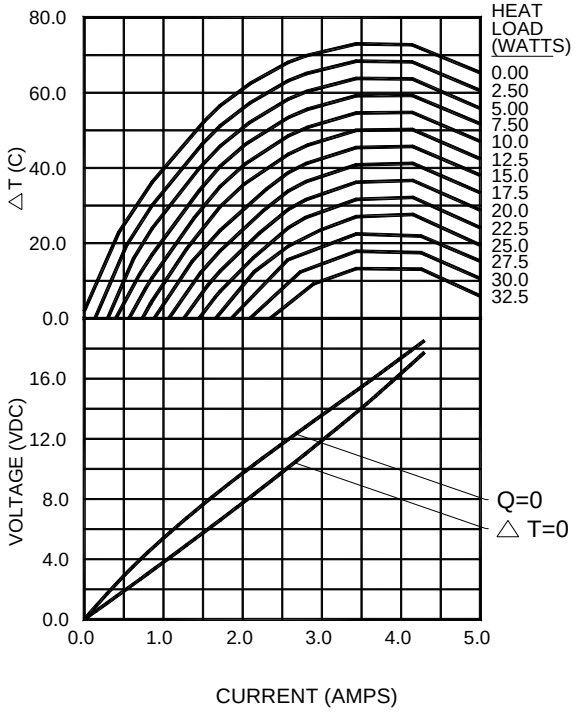
PERFORMANCE CURVES

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, 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.

CONTACT US:

For customer support or general questions please contact a local office below or consult our website for distributor information.

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