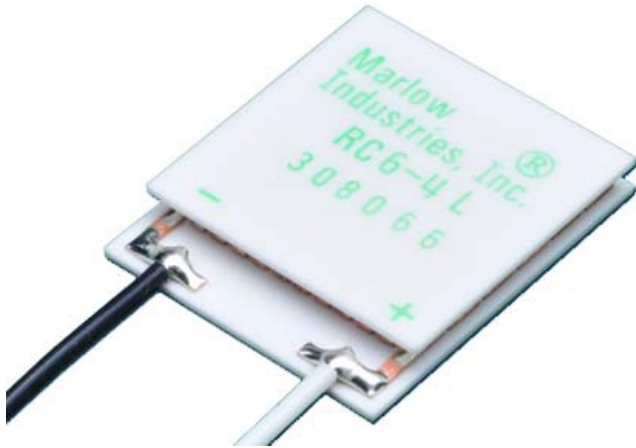




# Technical Data Sheet for RC6-4

## Single-Stage Thermoelectric Module



### NOMINAL PERFORMANCE IN NITROGEN

Hot Side Temperature (°C)	27	50
$\Delta T_{max}$ (°C):	65	73
Q <sub>max</sub> (watts):	20	22
I <sub>max</sub> (amps):	3.7	3.7
V <sub>max</sub> (vdc):	8.2	9.2
AC Resistance (ohms):	1.8	--
Device ZT	0.74	--

### PRODUCT FEATURES

- RoHS EU Compliant
- Rated operating temperature of 130°C.
- Ceramic Material: Aluminum Oxide
- Porch configuration for high strength lead wire connection.
- Superior nickel diffusion barriers on elements.
- High strength for rugged environment.
- RTV sealing option available.
- Lapped option available for multiple module applications.

### ORDERING OPTIONS

Model Number	Description
RC6-4-01	Leadwires
RC6-4-01L	Leadwires, Lapped
RC6-4-01S	Leadwires, Sealed
RC6-4-01LS	Leadwires, Lapped, Sealed
RC6-4-02L	Lapped, Nail Head Leadwires
RC6-4-05	Leadwires, bent-leads

### 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 method: Clamp with uniform pressure to a flat surface with thermal interface material. For additional information, please refer to our TEM Installation Guide.

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info@marlow-europe.eu

II-VI Japan Inc.  
81 43 297 2693 (tel)  
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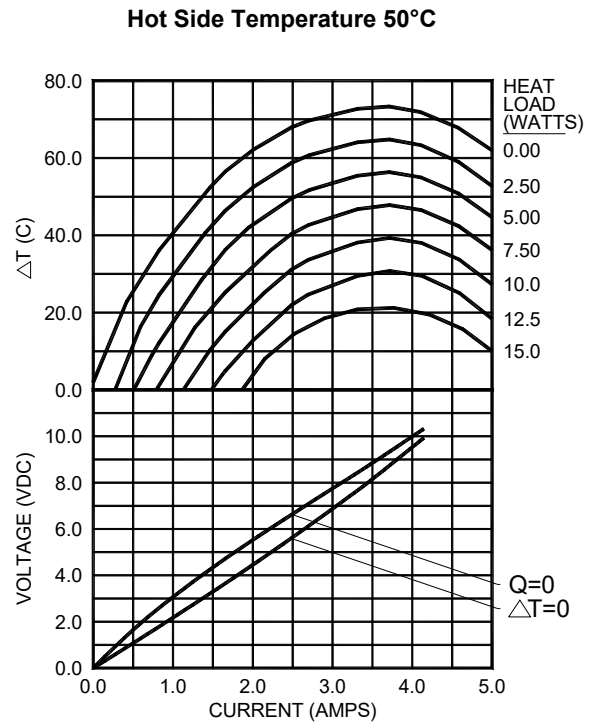
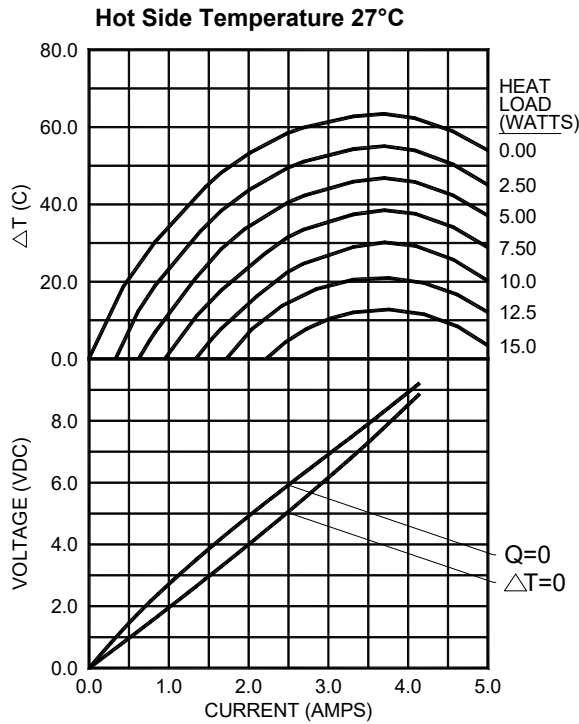
II-VI Singapore Pte., Ltd.  
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## THERMOELECTRIC COOLING PERFORMANCE CURVES

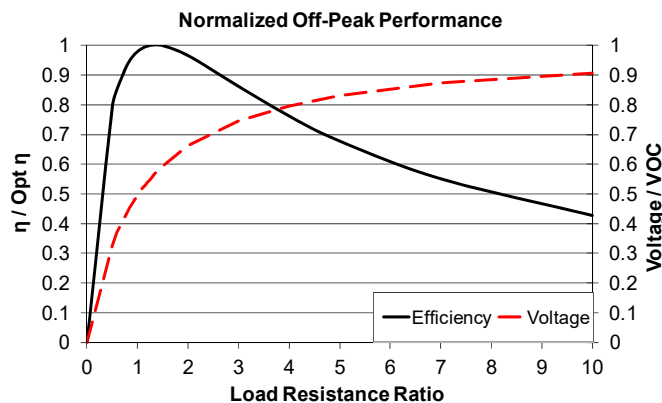
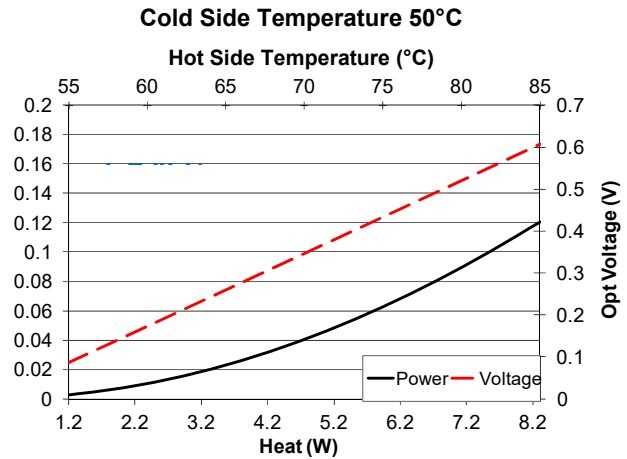
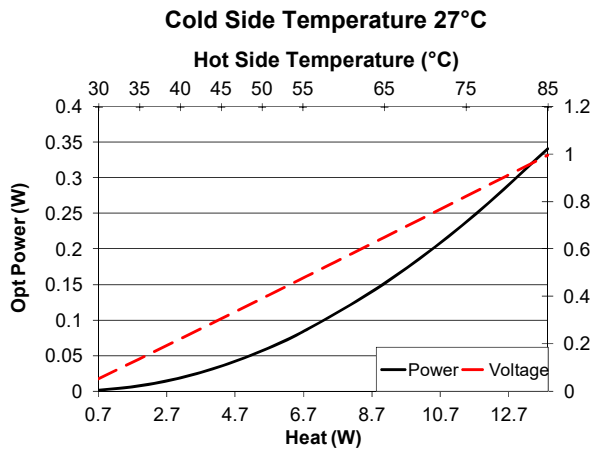
ENVIRONMENT: ONE ATMOSPHERE DRY NITROGEN



For performance information in a vacuum or with hot side temperatures other than 27°C or 50°C, contact one of our Applications Engineers at 877-627-5691.

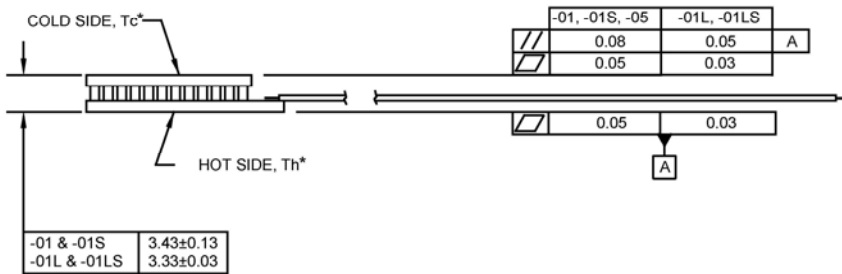
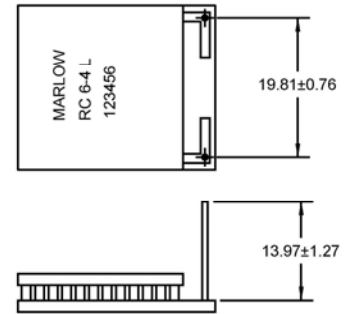
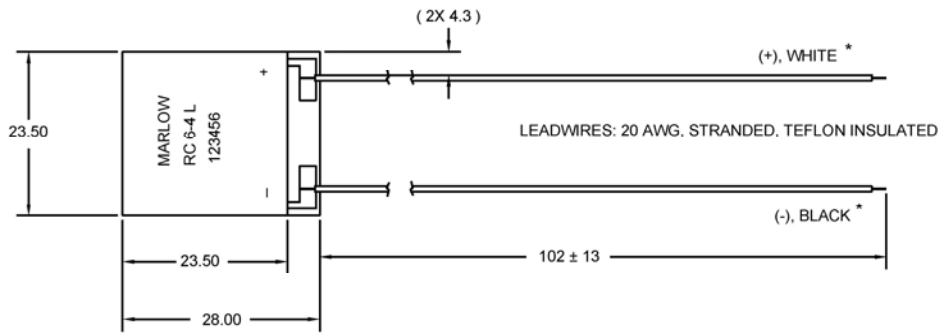
## POWER GENERATION PERFORMANCE CURVES

ENVIRONMENT: ONE ATMOSPHERE DRY NITROGEN

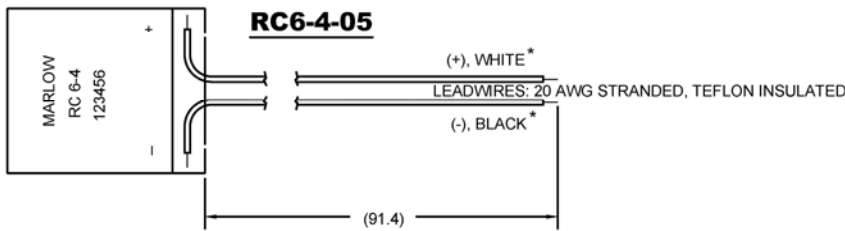


Hot Side Temperature (°C)	85	55	35
Cold Side Temperature (°C)	27	27	27
Optimum Efficiency, $\eta$ (%)	2.46	1.24	0.36
Optimum Power (W)	0.341	0.083	0.007
Optimum Voltage (V)	0.996	0.475	0.134
Load Resistance for Opt $\eta$ ( $\Omega$ )	2.90	2.71	2.58
Open Circuit Voltage, VOC (V)	1.75	0.84	0.24
Short Circuit Current (A)	0.79	0.40	0.12
Thermal Resistance (°C/W)	4.18	4.19	4.18

For performance information with hot side temperatures other than 27°C or 50°C, contact one of our Applications Engineers at 877-627-5691.

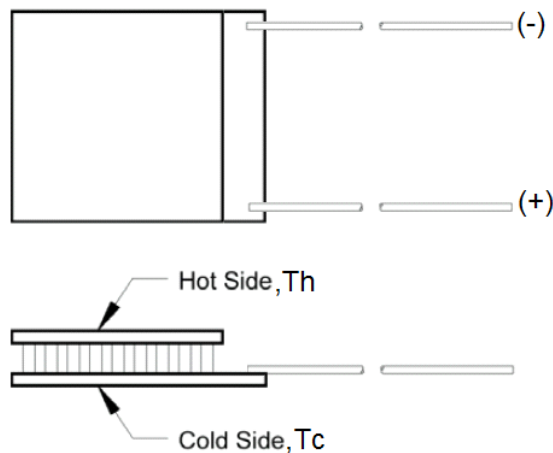


**-02L**



All units are in millimeters unless otherwise stated.

**\*NOTE: Cold side, hot side, positive lead, and negative lead are valid only for thermoelectric cooling. For power generation, refer to figure below:**



For customer support or general questions please contact a local office or visit our website at [www.marlow.com](http://www.marlow.com). Marlow reserves the right to make product changes without notice.