Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

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Email & Skype: info@chipsmall.com Web: www.chipsmall.com
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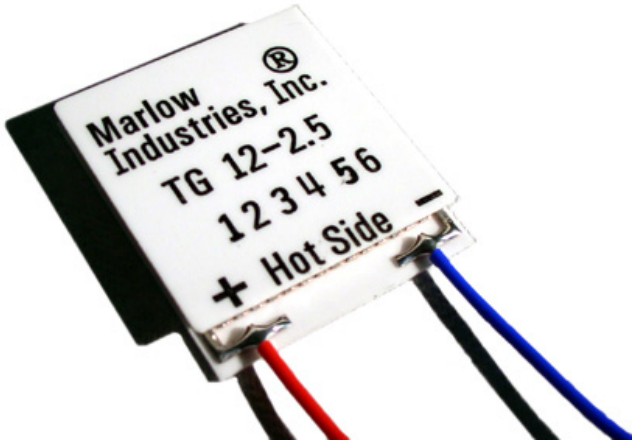
Technical Data Sheet for TG12-2.5

Single-Stage Thermoelectric Generator



NOMINAL PERFORMANCE IN NITROGEN

Cold Side Temperature (°C)	27±2
AC Resistance (ohms):	4.47 – 5.69
Device ZT	0.72

PRODUCT FEATURES

- RoHS EU Compliant
- Rated operating temperature of 200°C.
- Ceramic Material: Aluminum Oxide.
- Porch configuration for high strength leadwire 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
TG12-2.5-01	102 mm Leadwires
TG12-2.5-01L	102 mm Leadwires, Lapped
TG12-2.5-01S	102 mm Leadwires, Sealed
TG12-2.5-01LS	102 mm Leadwires, Lapped, Sealed
TG12-2.5-02LS	200 mm Leadwires, Lapped, Sealed

OPERATION CAUTIONS

For maximum reliability, continuous operation below 200°C (cold side and hot side) is recommended. Intermittent operation up to 230°C on the hot side of the TG is permissible.

INSTALLATION

Recommended mounting methods: Clamp with uniform pressure to a flat surface with thermal interface material. Recommend 1.4 MPa (200 psi) with thermal grease or flexible graphite pads. For additional information, please contact an applications engineer.

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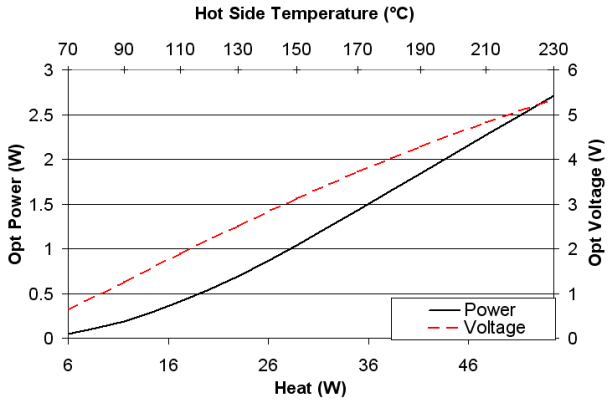
TYPICAL PERFORMANCE CURVES

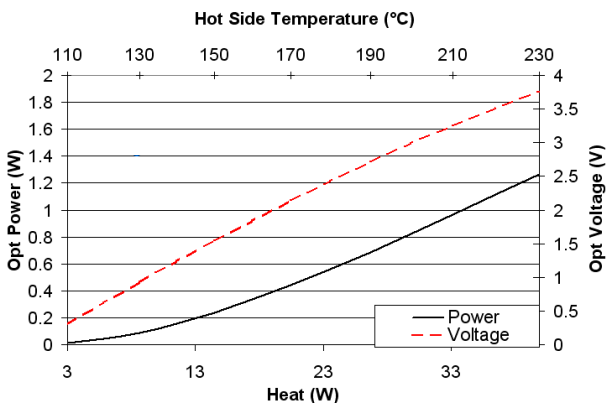
POWER GENERATION PERFORMANCE CURVES

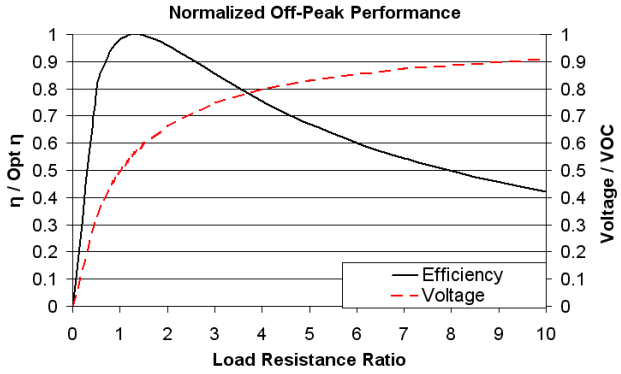
ENVIRONMENT: ONE ATMOSPHERE DRY NITROGEN

Cold Side Temperature 50°C



Cold Side Temperature 100°C

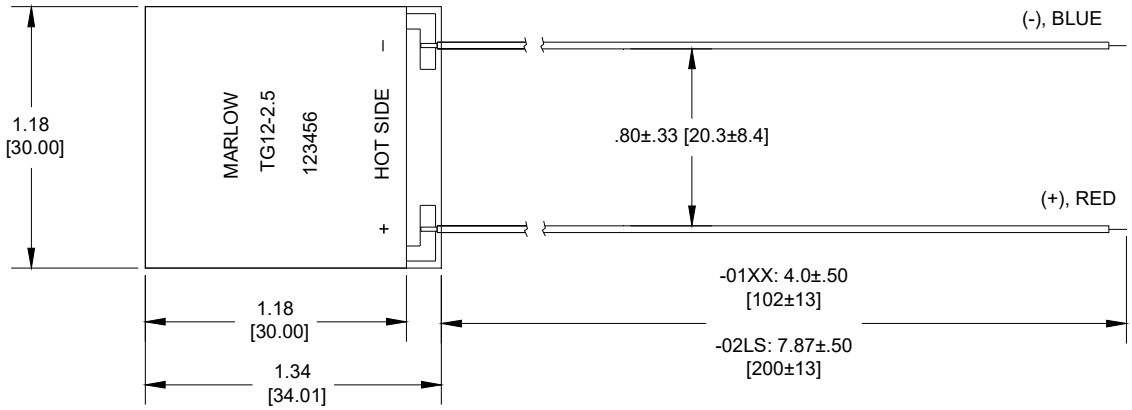


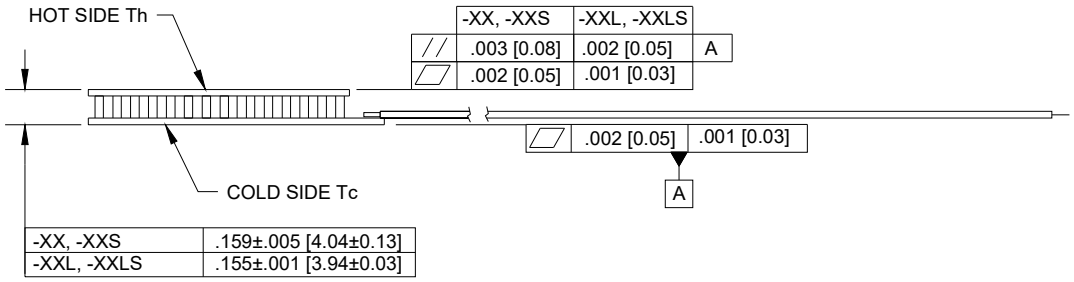


Hot Side Temperature (°C)	230	170	110
Cold Side Temperature (°C)	50	50	50
Optimum Efficiency, η (%)	5.02	4.14	2.43
Optimum Power (W)	2.71	1.43	0.41
Optimum Voltage (V)	5.33	3.71	1.89
Load Resistance for Opt η (Ω)	10.47	9.68	8.75
Open Circuit Voltage, VOC (V)	9.56	6.57	3.31
Closed Circuit Current (A)	1.14	0.88	0.50
Thermal Resistance (°C/W)	3.33	3.48	3.58

For performance information with cold side temperatures other than 50°C or 100°C, contact one of our Applications Engineers at 877-627-5691.

MECHANICAL CHARACTERISTICS





-XX, -XXS	.159±.005 [4.04±0.13]
-XXL, -XXLS	.155±.001 [3.94±0.03]

All units are in inches. All units in [ ] are in millimeters.

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