

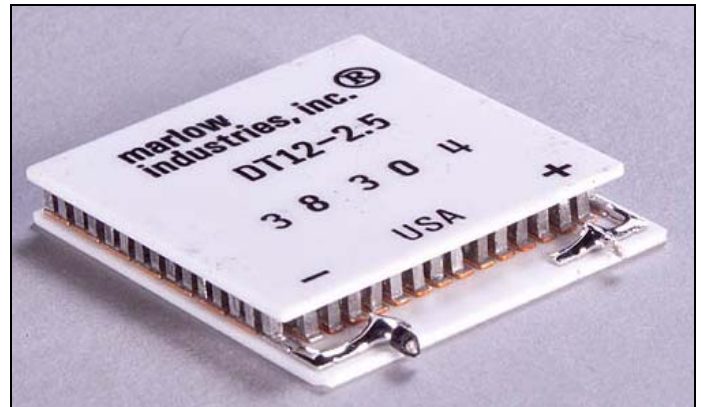


**Thermoelectric Cooler**

**DT12-2.5**

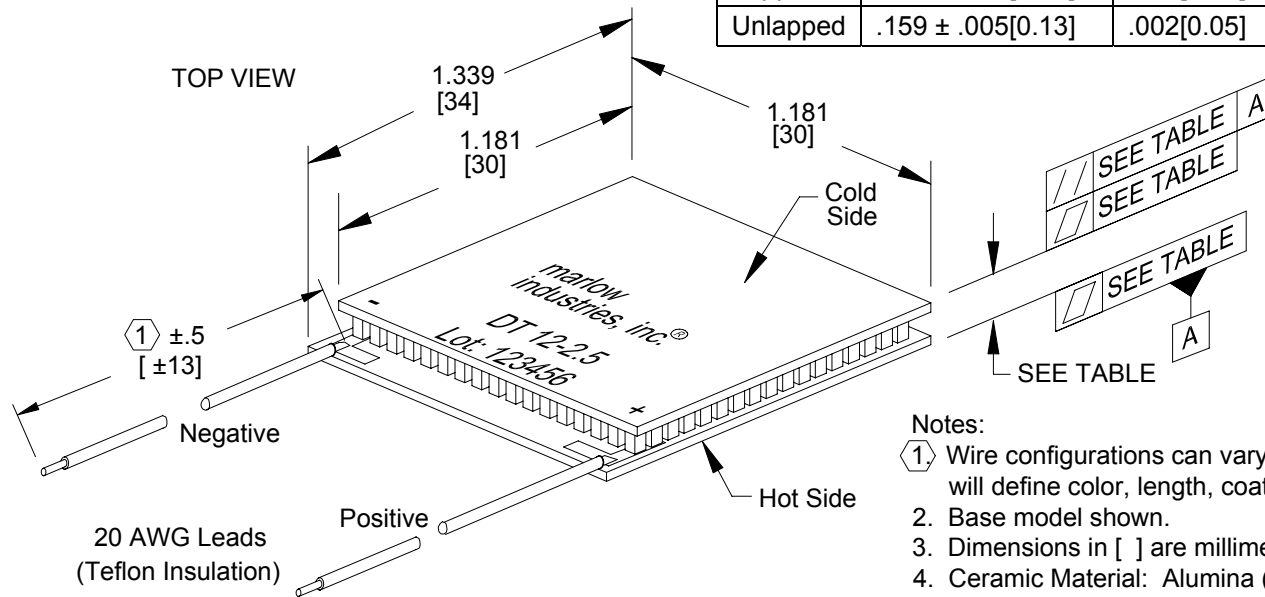
**Performance Values**

Hot Side Temperature (°C)	27°C	50°C
Δ Tmax (°C-dry N <sub>2</sub> ):	66	74
Qmax (watts):	23	26
I <sub>max</sub> (amps):	2.5	2.5
V <sub>max</sub> (vdc):	14.7	16.4
AC Resistance (ohms):	4.9	---



**Mechanical Characteristics**

	Height	Flatness	Parallelism
Lapped	.155 ± .001[0.03]	.001[0.03]	.002[0.05]
Unlapped	.159 ± .005[0.13]	.002[0.05]	.003[0.08]



**Notes:**

1. Wire configurations can vary. Dash number will define color, length, coating, and gage.
2. Base model shown.
3. Dimensions in [ ] are millimeters.
4. Ceramic Material: Alumina (AC)

**Ordering Options**

Model Number	Description
DT12-2.5-01	Base Model
DT12-2.5-01L	Lapped Model
DT12-2.5-01S	Sealed Model
DT12-2.5-01LS	Lapped and Sealed Model

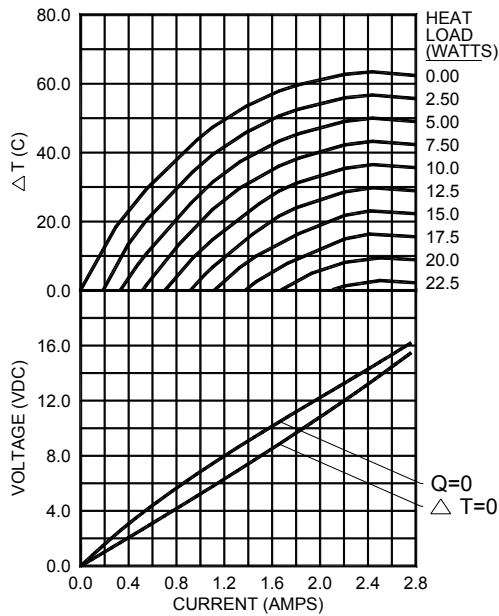
**Features**

- 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 improved leadwire strength
- RTV sealing option available to improve reliability in condensing environment
- Lapped option available for multiple module applications.

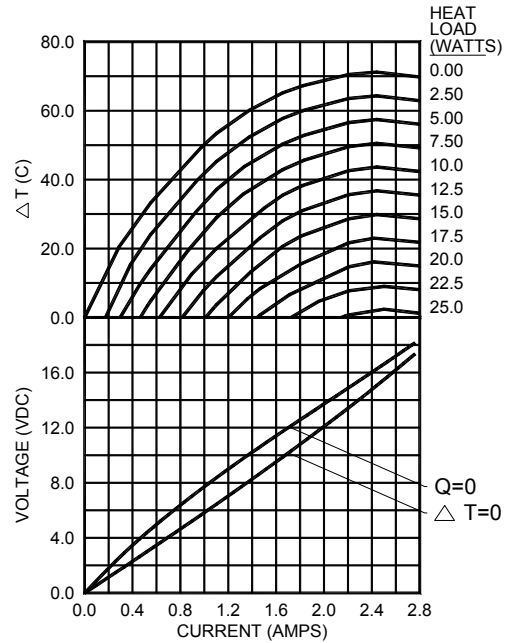
**Performance Curves**

**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**

Consult Marlow Industries' Thermoelectric Installation Guide or reliability report for more details. For additional information, please contact one of our application engineers for technical support.

**Operation Cautions**

Maximum storage and operation +150°C.

For maximum reliability, storage and operation below 85°C is recommended. Excessive power cycling and powering through thermostatic (on/off) control is not recommended.



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