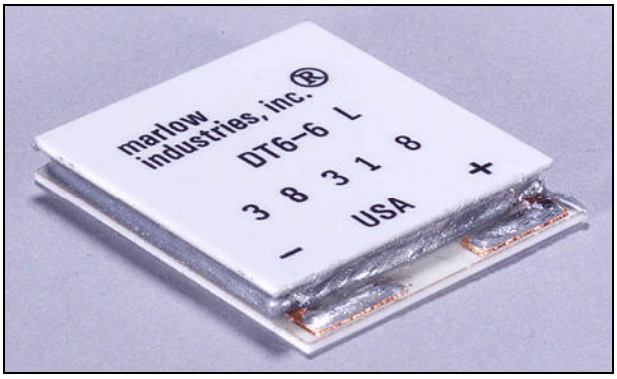
marlow industries inc.®

Thermoelectric Cooler DT6-6

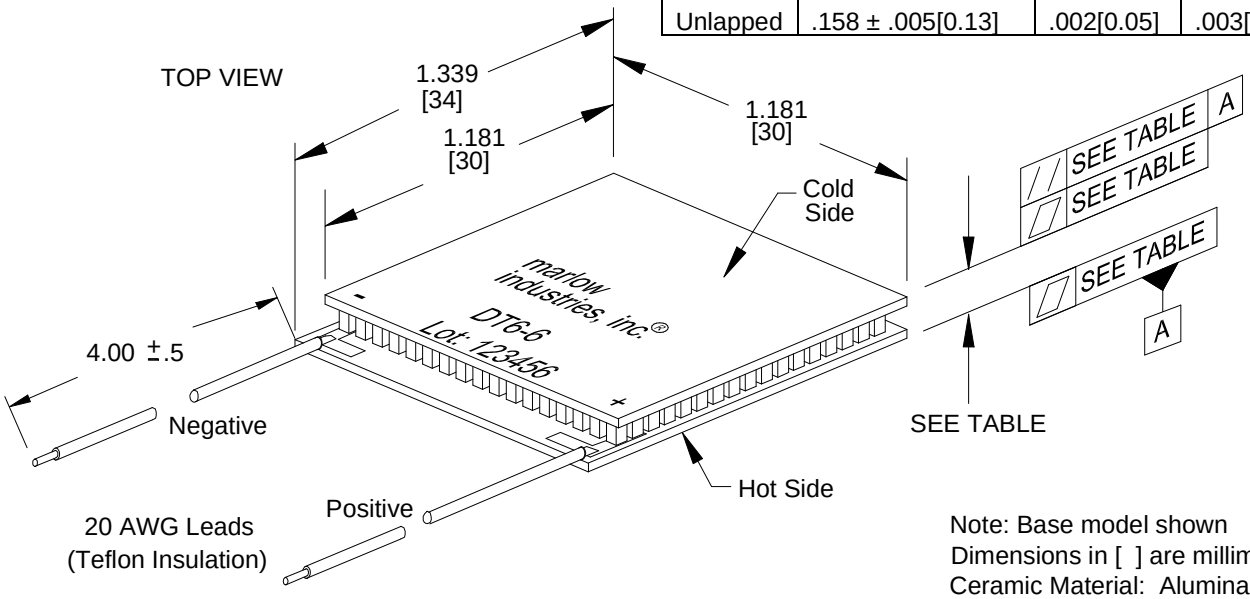
Performance Values

Hot Side Temperature (°C)	27°C	50°C
Δ Tmax (°C-dry N_2):	66	73
Qmax (watts):	30	33
Imax (amps):	5.6	5.6
Vmax (vdc):	8.2	9.2
AC Resistance (ohms):	1.2	---



Mechanical Characteristics

	Height	Flatness	Parallelism
Lapped	.154 ± .001[0.03]	.001[0.03].	.002[0.05]
Unlapped	.158 ± .005[0.13]	.002[0.05]	.003[0.08]



Note: Base model shown
Dimensions in [ ] are millimeters
Ceramic Material: Alumina (AC)

Ordering Options

Model Number	Description
DT6-6-01	Base Model
DT6-6-01L	Lapped Model
DT6-6-01S	Sealed Model
DT6-6-01LS	Lapped and Sealed Model

Features

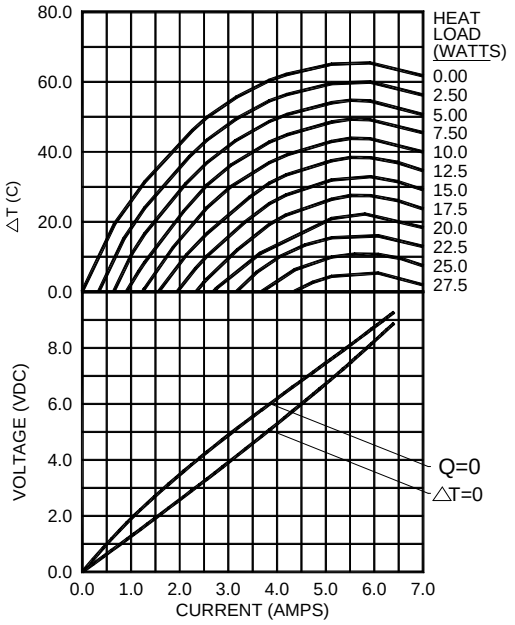
- Solid state reliability
- Built with high temperature solder with the ability to withstand higher assembly processing temperatures for short periods of time (<160°C)
- Superior nickel diffusion barriers on elements
- High strength for rugged environment
- Porched configuration for improved leadwire strength
- RTV sealing option available to improve reliability in condensing environment
- Lapped option available for multiple module applications.

Thermoelectric Cooler DT6-6

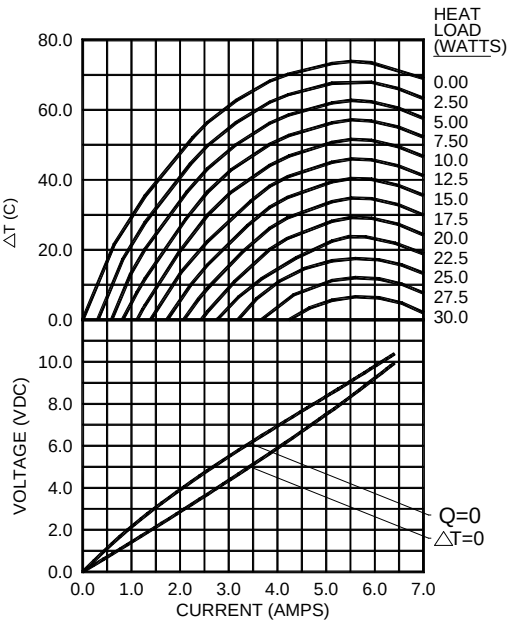
Performance Curves

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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