

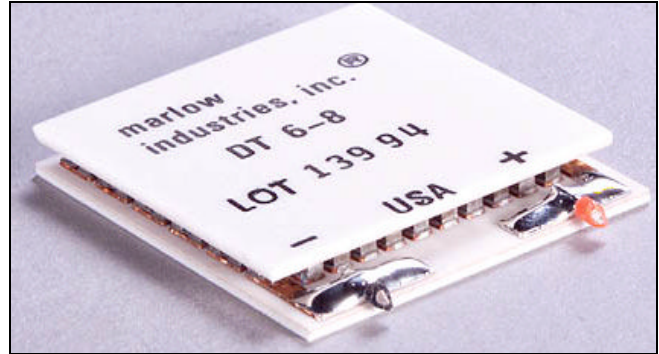


Thermoelectric Cooler

DT6-8

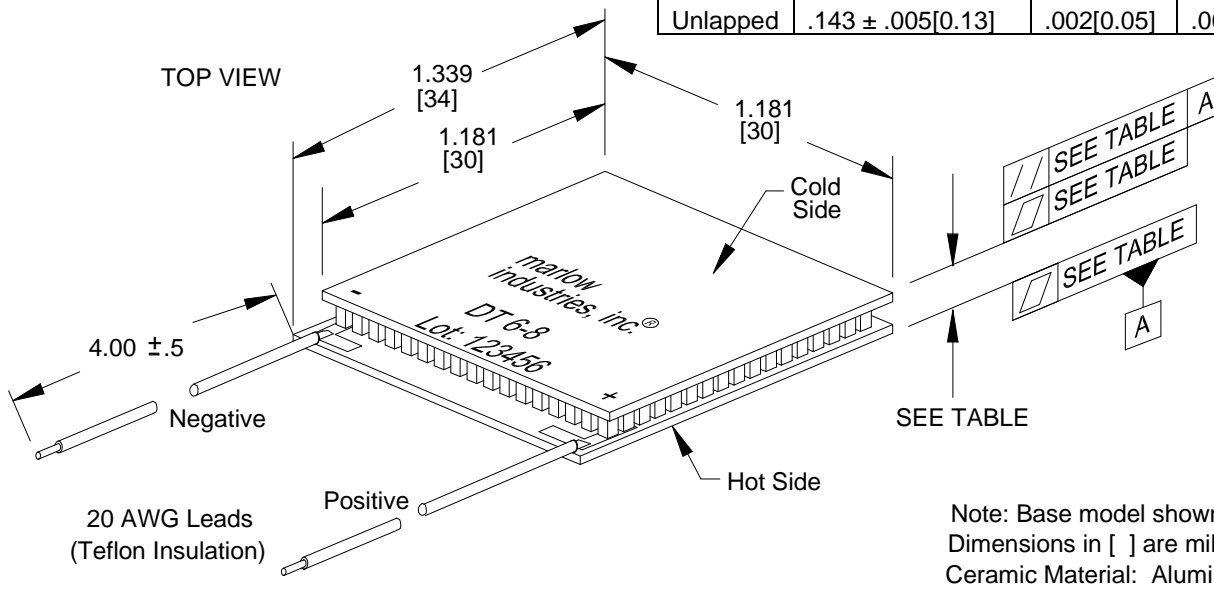
Performance Values

| | | |
|----------------------------------|------|------|
| Hot Side Temperature (°C) | 27°C | 50°C |
| Δ Tmax (°C-dry N ₂): | 65 | 73 |
| Qmax (watts): | 39 | 43 |
| I _{max} (amps): | 7.4 | 7.4 |
| V _{max} (vdc): | 8.2 | 9.2 |
| AC Resistance (ohms): | 0.9 | --- |



Mechanical Characteristics

| | Height | Flatness | Parallelism |
|----------|--------------------|-------------|-------------|
| Lapped | .139 ± .001 [0.03] | .001 [0.03] | .002 [0.05] |
| Unlapped | .143 ± .005 [0.13] | .002 [0.05] | .003 [0.08] |



Ordering Options

| Model Number | Description |
|--------------|-------------------------|
| DT6-8-01 | Base Model |
| DT6-8-01L | Lapped Model |
| DT6-8-01S | Sealed Model |
| DT6-8-01LS | Lapped and Sealed Model |

Features

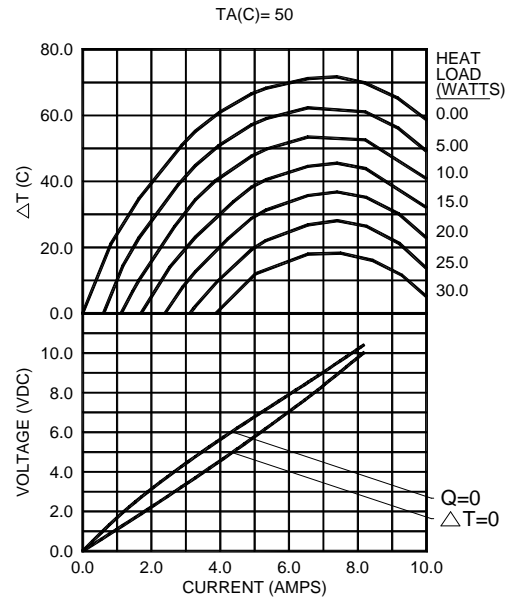
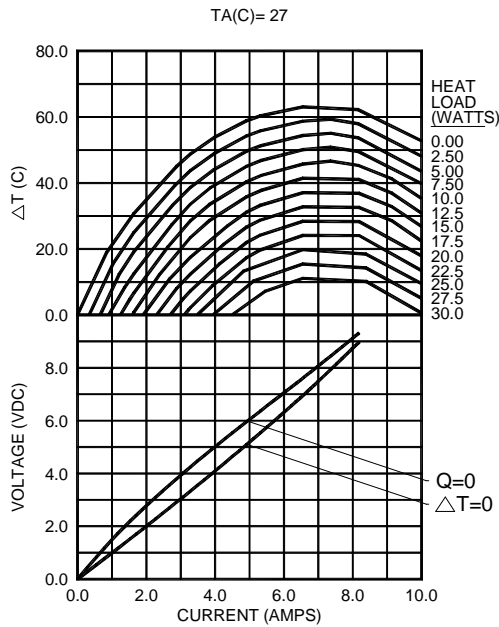
- Solid state reliability
- Built with high temperature solder with the ability to withstand higher assembly processing temperatures for short periods of time (<160°C)
- Superior nickel diffusion barriers on elements
- High strength for rugged environment
- Porched configuration for improved leadwire 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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