



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!



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The HiTemp ET Series of Thermoelectric Modules (TEMs) are designed to operate in high temperature environments.

This product line is available in multiple configurations and is ideal for applications that operate in temperatures above 80°C. Assembled with Bismuth Telluride semiconductor material, thermally conductive Aluminum Oxide ceramics, and high-temperature solder construction, the ET Series is designed for higher current and larger heat-pumping applications.

FEATURES

- High-temperature operation
- Reliable solid state
- No sound or vibration
- Environmentally-friendly
- RoHS-compliant

APPLICATIONS

- Automotive cooling
- Telecom cooling
- Outdoor environments
- Medical heating/cooling

TECHNICAL SPECIFICATIONS

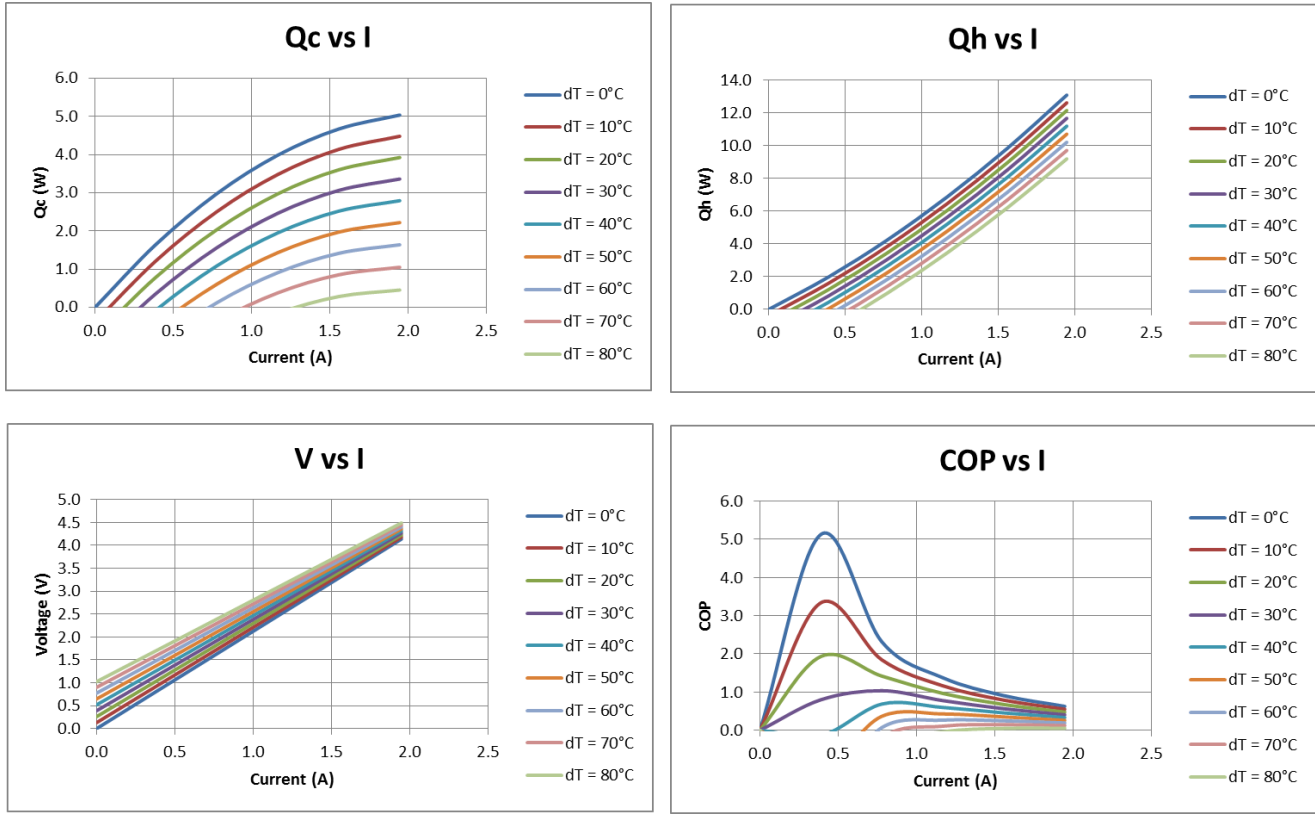
| | | |
|---------------------------|------|------|
| Hot Side Temperature (°C) | 85 | 110 |
| Qmax (W) | 5.0 | 5.2 |
| Delta Tmax (°C) | 87 | 94 |
| I _{max} (Amps) | 2.0 | 2.0 |
| V _{max} (Volts) | 4.4 | 4.9 |
| Module Resistance (Ohms) | 2.13 | 2.35 |

| SUFFIX | THICKNESS (PRIOR TO THINNING) | FLATNESS & PARALLELISM | HOT FACE | COLD FACE | LEAD LENGTH |
|--------|-------------------------------|------------------------|----------|-----------|-------------|
| 11 | 0.086" ± 0.002" | 0.002"/0.002" | Lapped | Lapped | 2.25" |

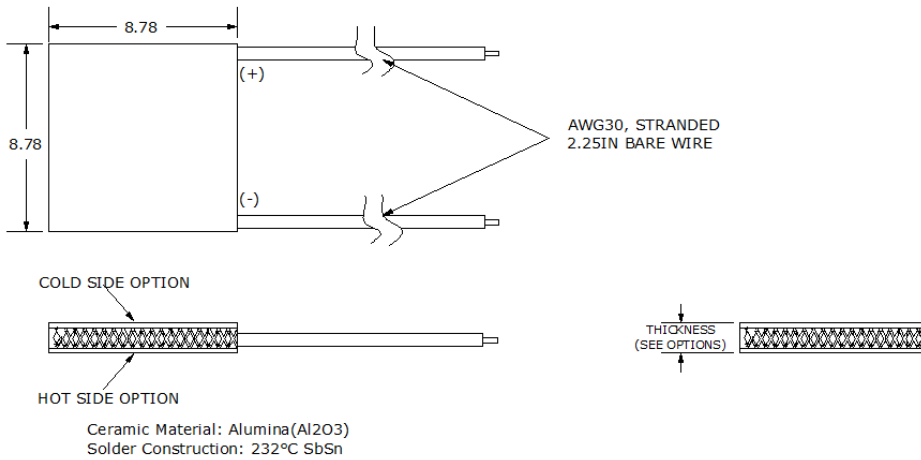
SEALING OPTIONS

| SUFFIX | SEALANT | COLOR | TEMPERATURE RANGE | DESCRIPTION |
|--------|---------|-------|-------------------|--|
| RT | RTV | Clear | -60 to +204 °C | Non-corrosive, silicone adhesive |
| EP | Epoxy | Black | -55 to +150 °C | Low density syntactic foam epoxy encapsulant |

PERFORMANCE CURVES AT $T_h = 85^\circ\text{C}$



MECHANICAL DRAWING



NOTES:

- Maximum Operating Temperature: 150°C
- Do not exceed I_{max} or V_{max} when operating module
- Reference assembly guidelines for recommended installation



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