



TEC datasheet

HT100175(40,40)

Description

The HT (High Temperature) series is designed for harsh high-temperature environments and long service life applications. It is assembled with high-strength Bismuth telluride thermoelectric material, high thermal conductivity and high insulation DBC (direct bonding copper) ceramics and high-temperature solder, which is suitable for high-temperature environment and industrial product applications. There are over 200 typical models available for selection. This series provides customized services and can also customize flat shaped cooling sheets.

Features

DC operation and Precise temperature control
 No sound or vibration and solid-state
 High performance and high reliability
 RoHS compliant
 Provide the customization service.

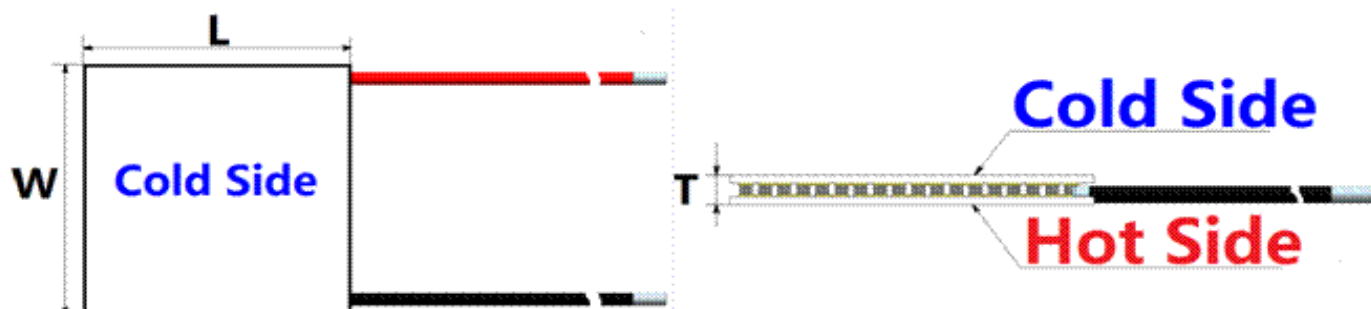
APPLICATIONS

Temperature stabilizer
 Medical instruments
 Industrial and testing instruments
 Blood analysis instrument
 Thermal shock apparatus

Performance Specification

Hot side temperature	25°C	50°C	Hot side temperature when working
QCmax (Watts)	158.9	170.1	Qc When $dT=0$ and $I=I_{max}$
Delta Tmax (°C)	67.0	71.0	dT when $I=I_{max}$ and $Qc=0$
I _{max} (amps)	11.1	11.1	Current When $dT=dT_{max}$ or $Qc=Qc_{max}$
U _{max} (Voltage)	24.1	26.5	Voltage When $dT=dT_{max}$ and $I=I_{max}$
AC resistance (ohms)	1.74	1.92	The module resistance is tested under AC
Tolerance	± 12%		For thermal and electricity parameters

Geometric Characteristics



Dimensions in millimeters

Dimensions in millimeters				Wire		
Length	Width	Thickness	Note	Model	Length	Terminal
40.0 ± 0.5	40.0 ± 0.5	3.24 ± 0.10		Customizable	Customizable	Customizable

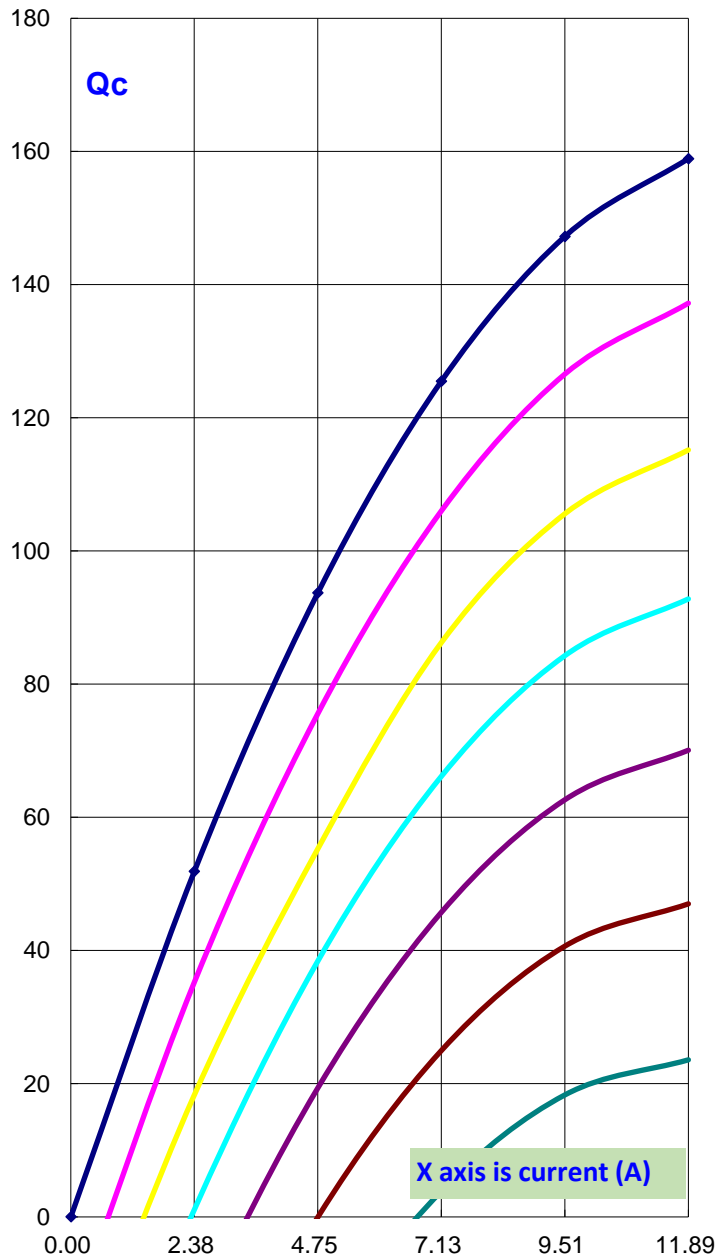


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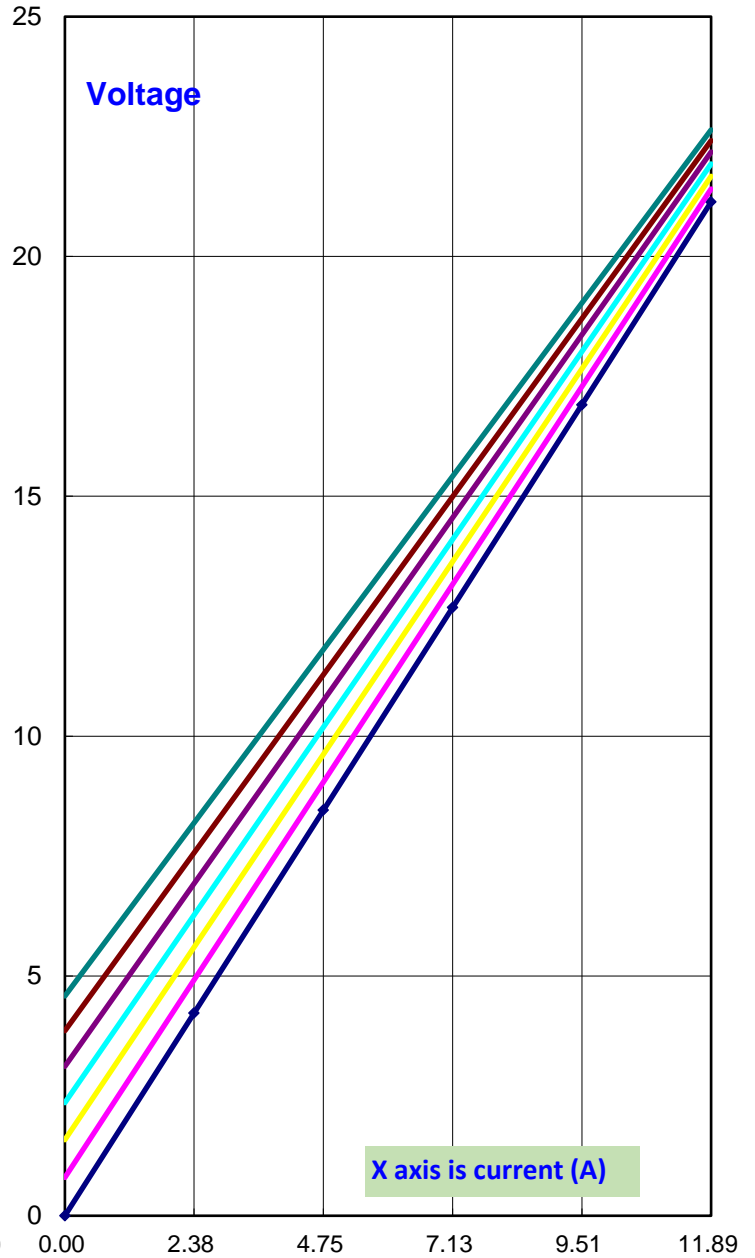
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Performance Curves at $T_h=25\text{ }^\circ\text{C}$

Qc Vs I Curve



Voltage Vs I Curve



— dT=0°C — dT=10°C — dT=20°C — dT=30°C — dT=40°C — dT=50°C — dT=60°C

Operation Cautions

- TEC is a wide voltage input device that uses a direct current (DC) power supply;
- Using voltage/current should be less than the maximum voltage/current;
- Pay attention to force balance during installation to prevent lateral pressure or any form of impact;
- Before Use, installing the hot side of TEC onto the heatsink;
- Use and store in an environment less than 80 °C and less than 80% relative humidity;;