



# Thermoelectric Cooler

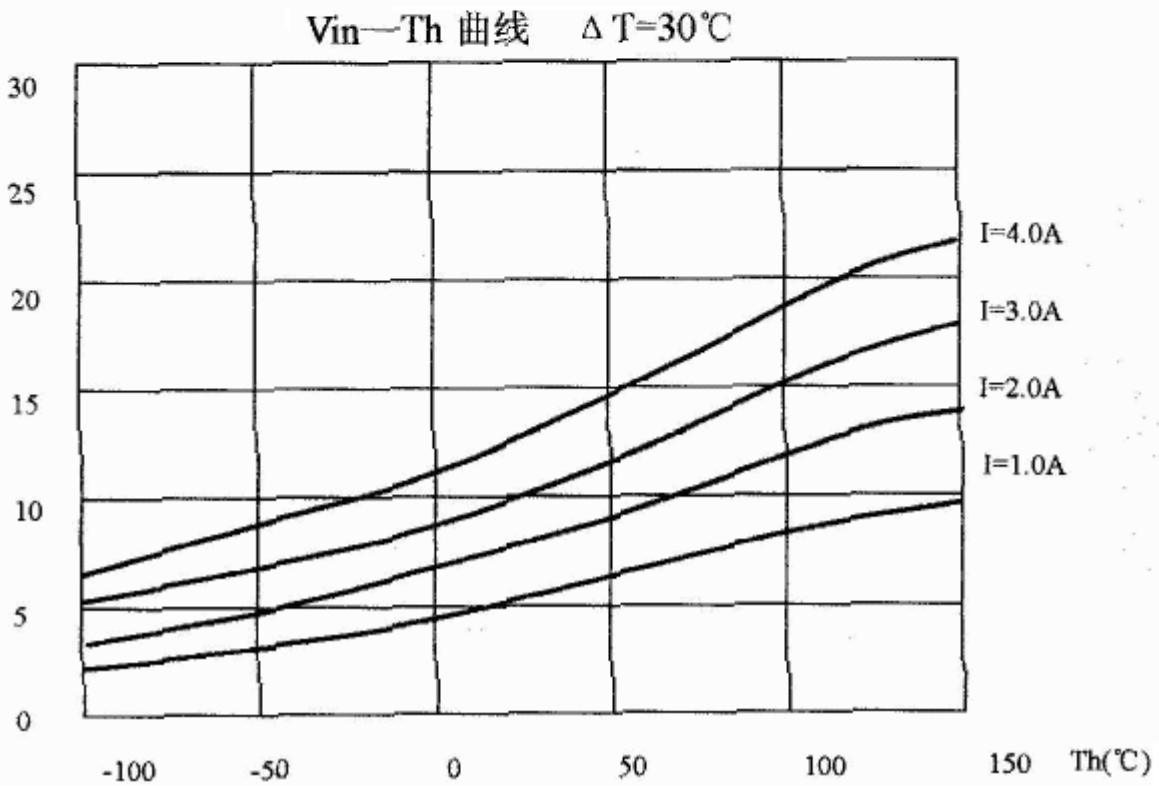
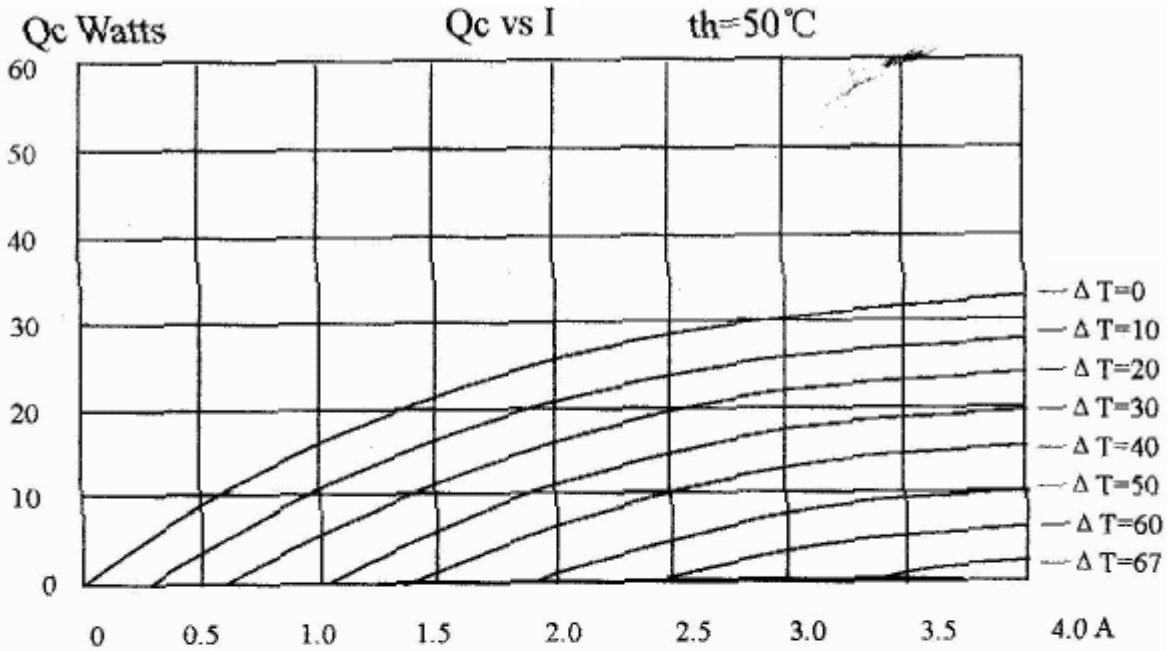
**TES1-12704**

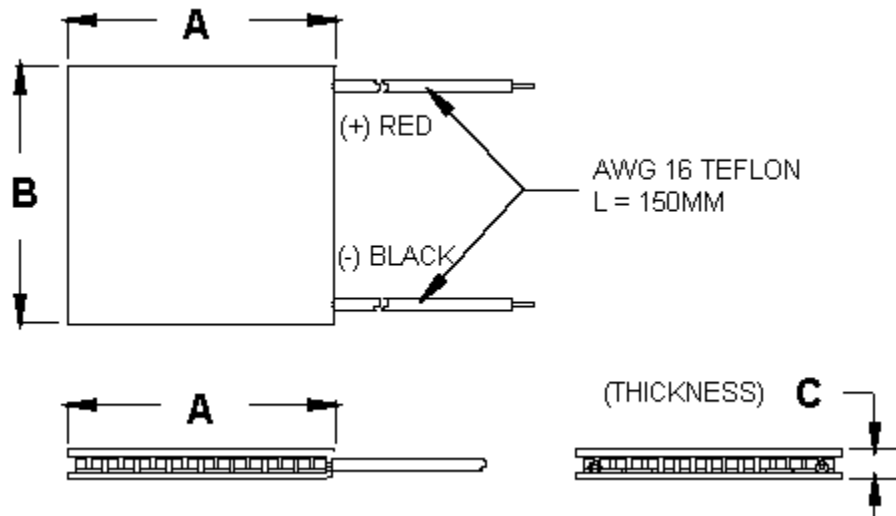
## Performance Specifications

Hot Side Temperature (°C)	25° C	50° C
Qmax (Watts)	34	37
Delta Tmax (°C)	66	75
I <sub>max</sub> (Amps)	3.3	3.3
V <sub>max</sub> (Volts)	14.0	16.1
Module Resistance (Ohms)	3.1	3.6



Performance curves on page 2





Ceramic Material: Alumina (Al<sub>2</sub>O<sub>3</sub>)  
 Solder Construction: 138°C, Bismuth Tin (BiSn)

**Size table:**

A	B	C			
30	30	3.3			

**Operating Tips**

- Max. Operating Temperature: 138°C
- Do not exceed I<sub>max</sub> or V<sub>max</sub> when operating module.
- Life expectancy: 200,000 hours
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- Please consult HB for moisture protection options (sealing).
- Failure rate based on long time testings: 0.2%.