

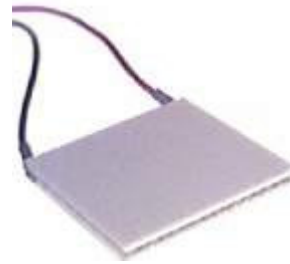


## Thermoelectric Cooler

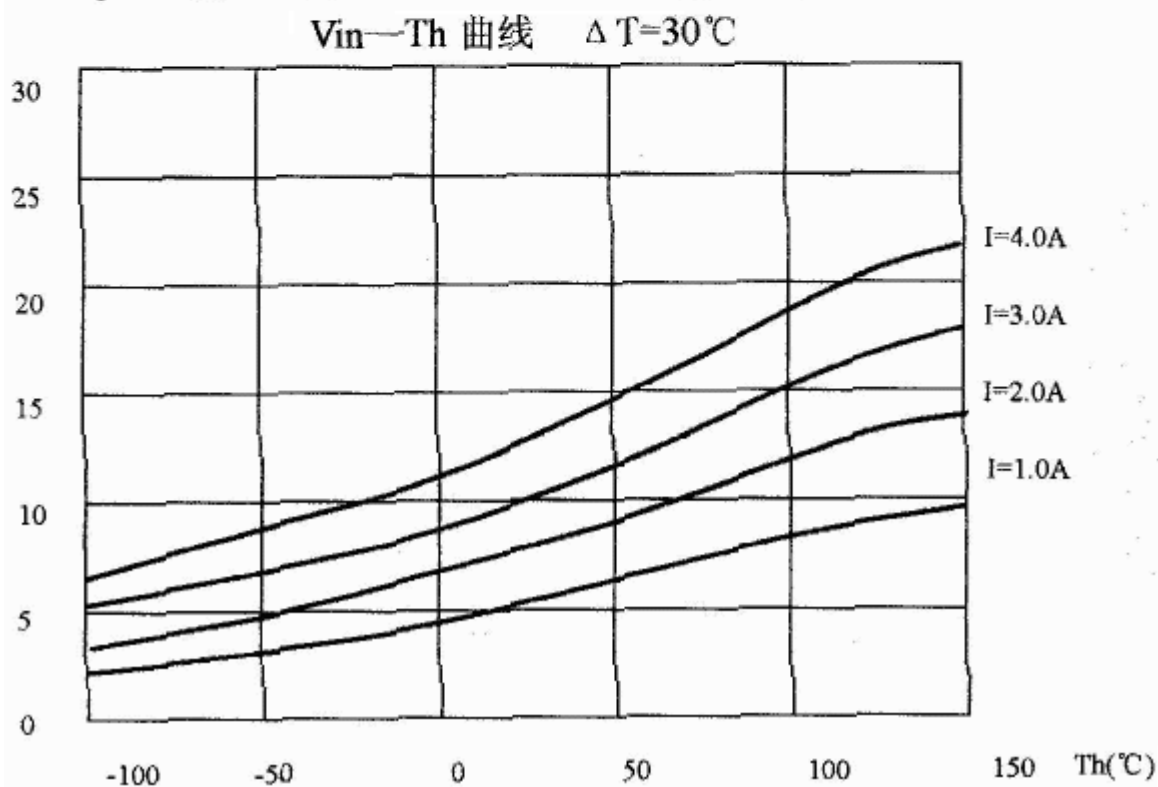
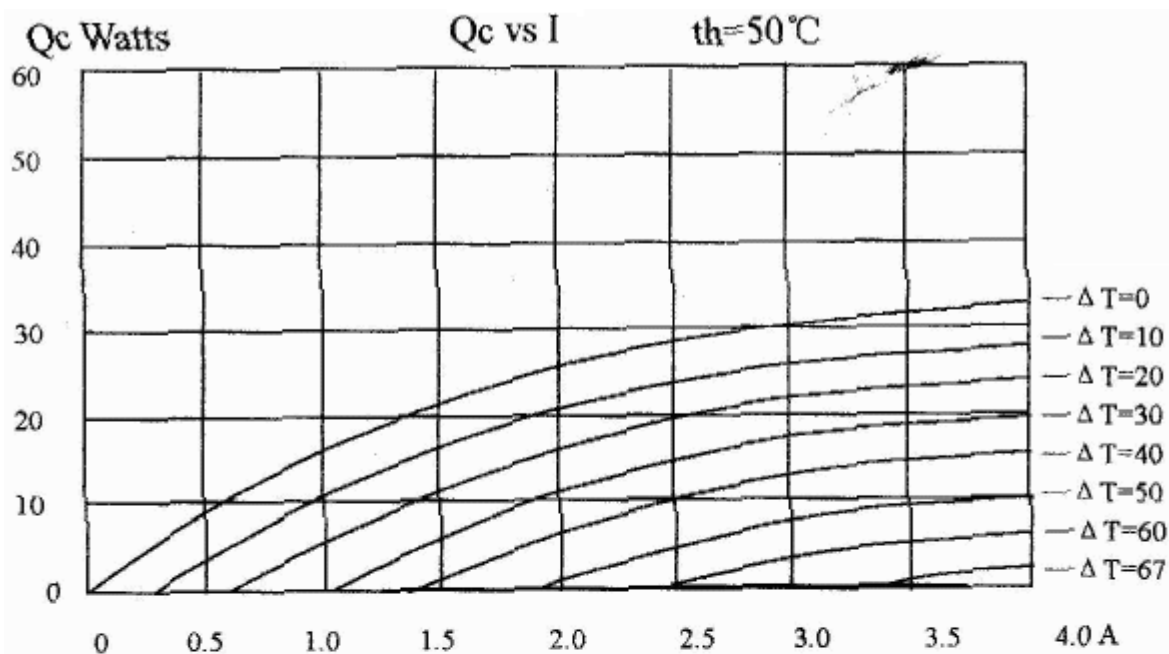
**TES1-12704**

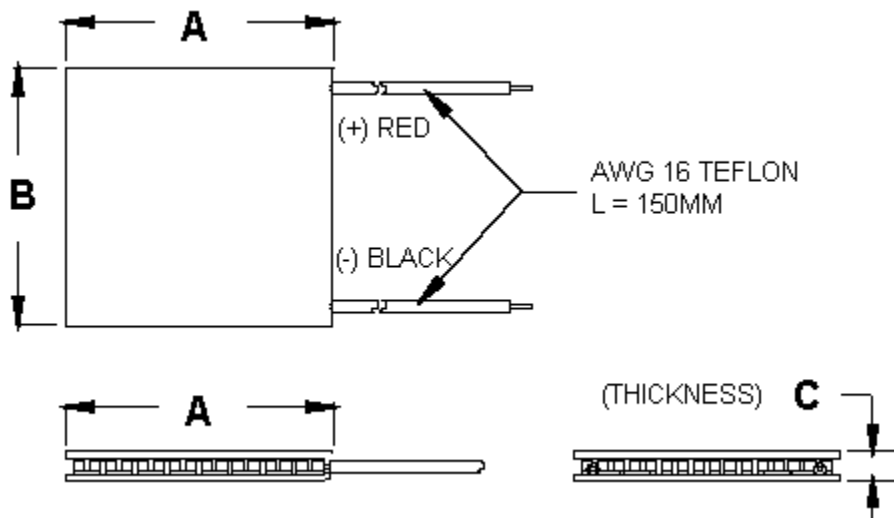
### Performance Specifications

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 ( $\text{Al}_2\text{O}_3$ )  
 Solder Construction: 138°C, Bismuth Tin (BiSn)

#### Size table:

<b>A</b>	<b>B</b>	<b>C</b>			
30	30	3.3			

#### Operating Tips

- Max. Operating Temperature: 138°C
- Do not exceed  $I_{\text{max}}$  or  $V_{\text{max}}$  when operating module.
- Life expectancy: 200,000 hours
- Please consult HB for moisture protection options (sealing).
- Failure rate based on long time testings: 0.2%.