



Thermoelectric Cooler

TEC1-12705

Performance Specifications

Hot Side Temperature (°C)	25° C	50° C
Qmax (Watts)	43	49
Delta Tmax (°C)	66	75
I _{max} (Amps)	5.3	5.3
V _{max} (Volts)	14.2	16.2
Module Resistance (Ohms)	2.40	2.75



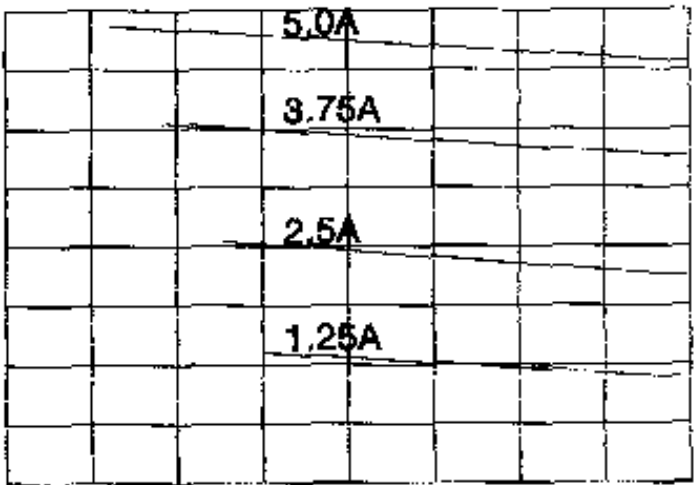
Performance curves on page 2





TEC1-12705

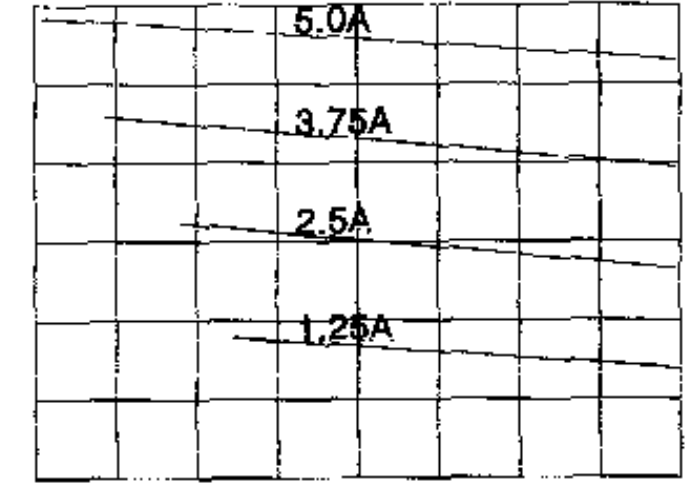
Th = 25 C



V(v)

16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0

Th = 50 C



V(v)

18.0
15.0
12.0
9.0
6.0
3.0
0.0

0 70 60 50 40 30 20 10 0

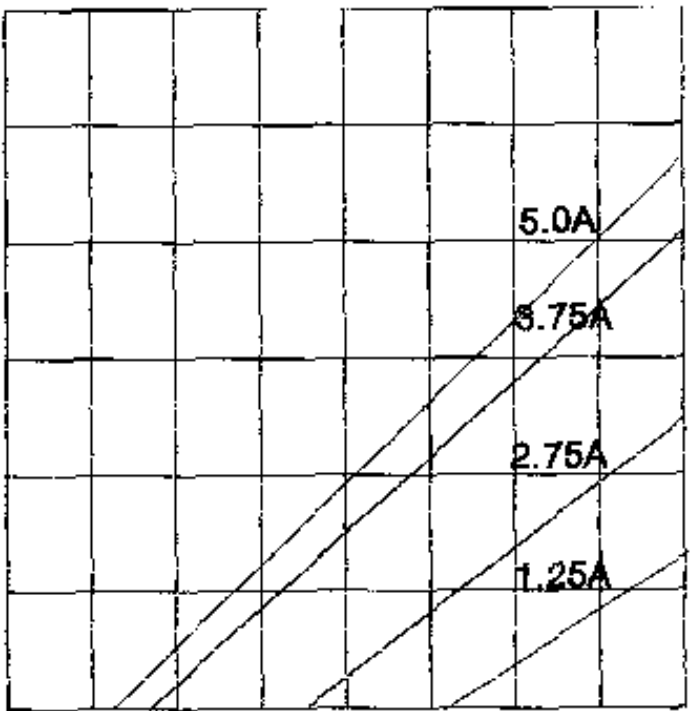
Delta T (C)

80 70 60 50 40 30 20 10 0

Delta T (C)

Qc(w)

60
50
40
30
20
10
0



Qc(w)

60
50
40
30
20
10
0

80 70 60 50 40 30 20 10 0

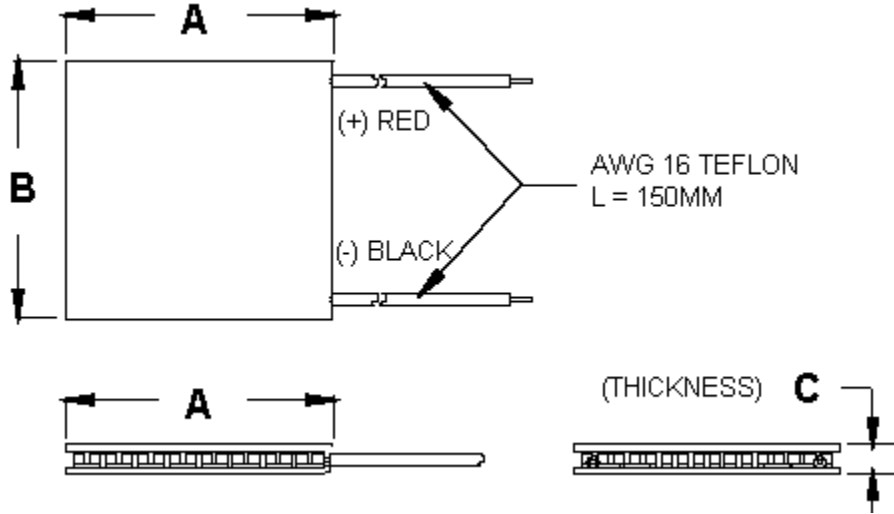
Delta T (C)

80 70 60 50 40 30 20 10 0

Delta T (C)



TEC1-12705



Ceramic Material: Alumina (Al_2O_3)
Solder Construction: 138°C, Bismuth Tin (BiSn)

Size table:

A	B	C			
40	40	4.2			

Operating Tips

- Max. Operating Temperature: 138°C
- Do not exceed I_{max} or V_{max} 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%.