

SPECIFICATION

Product : Thermoelectric module

Part Number : HPE-200-14-06

1 . Scope

- 1—1 This specification is applied to thermoelectric modules supplied by GCS
- 1—2 Revision of these specifications is carried out after consent.

2 . Specification

2 - 1 Parameters

Parameters			Remarks
Internal resistance			Note-1
I _{max.}	15.4 A		Note-2
V _{max.}	24.8 V		Note-3
	Th=25°C	Th=50°C	
Q _{max.}	232.0 W	249.4W	Note-4
ΔT _{max.}	68°C	78	Note-5
solder melting point	138 °C		Note-6
Maximum. compress.	1MPa		Note-7

Note-1 Measured by AC 4-terminal method at 25°C.

Note-2 Maximum current at ΔT_{max.}

Note-3 Maximum voltage at ΔT_{max.}

Note-4 Maximum cooling capacity at I_{max.}, V_{max.} and ΔT = 0°C.

Note-5 Maximum temperature difference at I_{max.}, V_{max.} and Q = 0W.

(Maximum parameters are measured in a vacuum 1.3P)

Note-6 The solder melting point of thermoelectric module

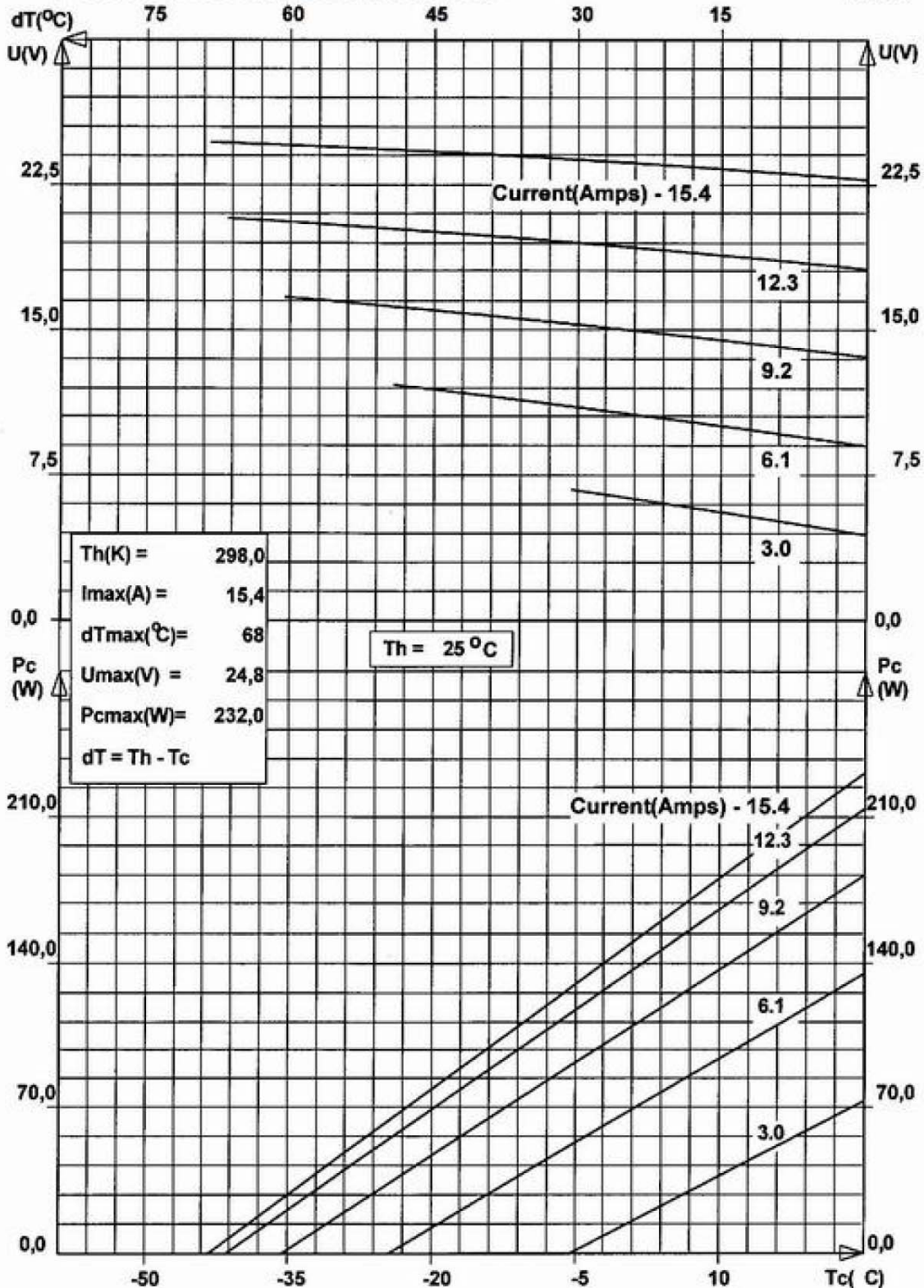
Note-7 Recommended maximum compression (not destruction limit)



2 -2 Recommendations:

- high cooling capacity from a small surface and long lifetime in power cycling applications with change of current polarity
- operation temperature up to 90°C for long lifetime;
- with operation current close to 0.5 I_{max} extremely high COP (coefficient of performance possible)

2 - 3 Performance Graph (298K)



2 - 4 Performance Graph (323K)

