SPECIFICATION

Product : Thermoelectric module

Part Number : HPE-127-14-06

1. Scope

1—1 This specification is applied to Multicomp thermoelectric modules

1—2 Revision of these specifications is carried out after consent.

${\bf 2}$. Specification

2 - 1 Parameters

Parameters			Remarks
Internal resistance	$0.85 \ \Omega \pm 10\%$		Note-1
Imax.	$15.4\mathrm{A}$		Note-2
Vmax.	15.7 V		Note-3
	Th=25°C		
Qmax.	$150.0 \mathrm{W}$		Note-4
⊿Tmax.	68°C		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 \square Tmax.

Note-3 Maximum voltage at \square Tmax.

Note-4 Maximum cooling capacity at Imax.,Vmax. and $\Delta T = 0$ °C.

Note-5 Maximum temperature difference at Imax.,Vmax. and Q = 0W.

(Maximum parameters are measured in a vacuum $1.3\mathrm{P}$)

Note-6 The solder melting point of thermoelectric module

Note-7 Recommended maximum compression (not destruction limit)

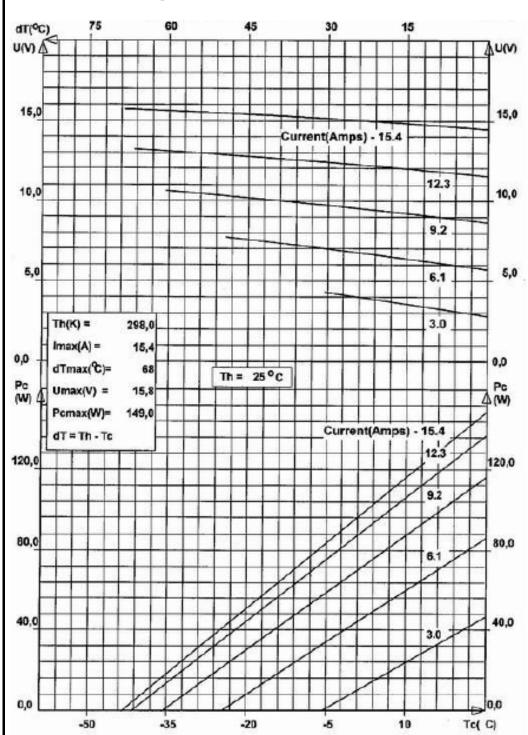


2 -2 Recommendations:

- 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; up to 110 degC for short periods
- with operation current close to 0.5 Imax extremely high COP (coefficient of performance possible)

- preferable application; high cooling capacity at high temperatures / cycling



2 - 3 Performance Graph (298K)

