## **SPECIFICATION**

## Product : Thermoelectric module

Part Number : PE1-12708AC

## 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	$1.50 \ \Omega \pm 10\%$		Note-1
Imax.	8.5 A		Note-2
Vmax.	15.7 V		Note-3
	Th=27°C	Th=50°C	
Qmax.	77.1 W	$85~\mathrm{W}$	Note-4
⊿Tmax.	70 °C	77 °C	Note-5
solder melting point	235 °C		Note-6
Maximum. compress.	1MPa		Note-7

Note-1 Measured by AC 4-terminal method at  $25^{\circ}$ C.

Note-2 Maximum current at ⊿Tmax.

Note-3 Maximum voltage at ⊿Tmax.

Note-4 Maximum cooling capacity at Imax., Vmax. and  $\Delta T = 0^{\circ}C$ .

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:

- Operating range: -40 °C to +100 °C

- Dropping or exerting mechanical shock will cause breakage, take care in handling

- Thinly spread thermally conductive grease should be placed between module and heat exchanger

- Surface deviation from flatness should be kept under 0.02mm

- For optimum reliability and performance it is recommended that the module be utilised <0.7 I max

2-3 Outline Drawing