

# SPECIFICATION

Product : Thermoelectric module

Part Number : PE1-7108AC

## 1 . Scope

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

## 2 . Specification

### 2 - 1 Parameters

Parameters		Remarks	
Internal resistance	0.85 $\Omega$ $\pm$ 10%	Note-1	
I <sub>max.</sub>	8.5 A	Note-2	
V <sub>max.</sub>	8.8 V	Note-3	
	Th=27°C	Th=50°C	
Q <sub>max.</sub>	43.1 W	48.0 W	Note-4
$\Delta$ T <sub>max.</sub>	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°C.

Note-2 Maximum current at  $\Delta$ T<sub>max.</sub>

Note-3 Maximum voltage at  $\Delta$ T<sub>max.</sub>

Note-4 Maximum cooling capacity at I<sub>max.</sub>,V<sub>max.</sub> and  $\Delta$ T = 0°C.

Note-5 Maximum temperature difference at I<sub>max.</sub>,V<sub>max.</sub> 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:

- 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