

SPECIFICATION

Product : Thermoelectric module

Part Number : PE-031-10-15

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	1.03 $\Omega \pm 10\%$	Note-1
I _{max.}	3.2 A	Note-2
V _{max.}	3.8 V	Note-3
	Th=25°C	
Q _{max.}	7.3 W	Note-4
$\Delta T_{max.}$	72°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 $\Delta T_{max.}$

Note-3 Maximum voltage at $\Delta T_{max.}$

Note-4 Maximum cooling capacity at I_{max.}, V_{max.} and $\Delta T = 0^\circ\text{C}$.

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:

- maximum temperature for short time: 110 °C
- operation temperature up to 90°C for long lifetime;
- good reliability in ON-OFF mode
- recommended operation current not higher than 0.7 of I_{max}

2 - 3 Performance Graph

