

SPECIFICATION

Product : Thermoelectric module

Part Number : TE1-19913L

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	1.4 Ω \pm 10%	Note-1	
I _{max.}	13 A	Note-2	
V _{max.}	24.1 V	Note-3	
	Th=27°C	Th=50°C	
Q _{max.}	200 W	224 W	Note-4
Δ T _{max.}	68°C	75°C	Note-5
solder melting point	138°C		Note-6
Maximum. compress.	98.07N/cm ² (10 kgf/cm ²)		Note-7

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

Note-2 Maximum current at Δ T_{max.}

Note-3 Maximum voltage at Δ T_{max.}

Note-4 Maximum cooling capacity at I_{max.}, V_{max.} and Δ T = 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:

- Operating range: -40 °C to +90 °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