

SPECIFICATION

Product : Thermoelectric module

Part Number : PF-031-14-11

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	0.41 Ω \pm 10%	Note-1
I _{max.}	8.5 A	Note-2
V _{max.}	3.8 V	Note-3
	Th=25°C	
Q _{max.}	19.0 W	Note-4
Δ T _{max.}	70°C	Note-5
solder melting point	232 °C	Note-6
Maximum. compress.	1MPa	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:

- maximum temperature for short time: 200 °C
- operation temperature up to 150°C for long lifetime;
- ON/OFF cycling mode reliability at high temperature
- recommended operation current not higher than 0.7 of Imax
- preferable application; thermal management

2 - 3 Performance Graph (298K and 323K respectively)



