

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 I_{max}
- preferable application; thermal management

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



