Thermoelectric Module



Scope

This specification is applied to multicomp thermoelectric modules Revision of these specifications is carried out after consent

Specifications

| Para | Remarks | | |
|----------------------|-----------|--------|--------|
| Internal resistance | 1.03 Ω | Note-1 | |
| I max. | 3.2 | Note-2 | |
| V max. | 3.8 | Note-3 | |
| - | Th = 25°C | - | - |
| Q max. | 7.3 W | - | Note-4 |
| ∆T max. | 72°C | - | Note-5 |
| Solder melting point | 138 | Note-6 | |
| Maximum compress | 1 M | Note-7 | |

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

Note-2 Maximum current at ΔT max.

Note-3 Maximum voltage at ΔT max.

Note-4 Maximum cooling capacity at I max. V max. and $\Delta T = 0^{\circ}C$

Note-5 Maximum temperature difference at I max. V max. and Q = 0 W

(Maximum parameters are measured in a vacuum 1.3 P)

Note-6 The solder melting point of thermoelectric module

Note-7 Recommended maximum compression (not destruction limit)

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.

| Specification Table | Thot = | | | | |
|-----------------------|-----------|------------|---|---|---|
| I max. (A) U max. (V) | Qc max. W | dT max. °C | Α | В | н |

| I max. (A) | U max. (V) | Qc max. W | dT max. °C | Α | В | н | Part Number |
|------------|------------|-----------|------------|----|----|-----|----------------|
| 3.2 | 3.8 | 7.5 | 74 | 15 | 15 | 3.8 | MCPE-031-10-15 |

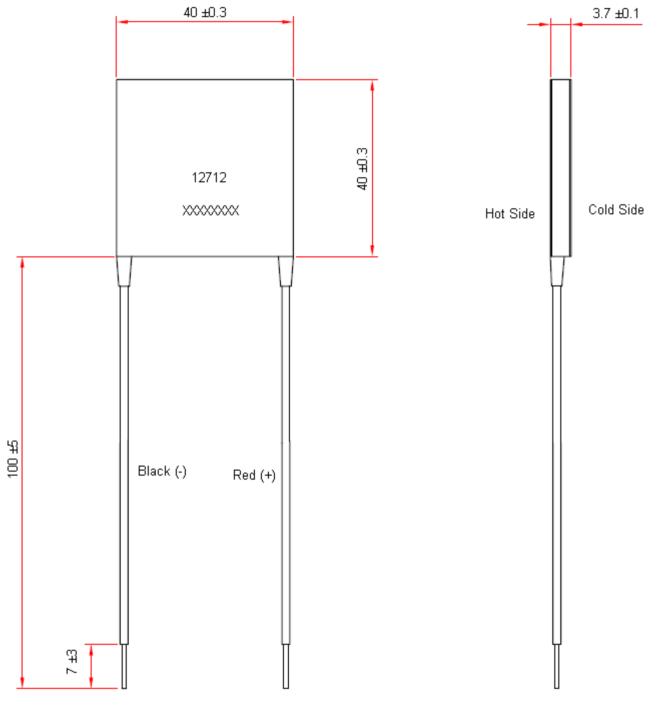
Dimensions : Millimetres



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Outline Drawing



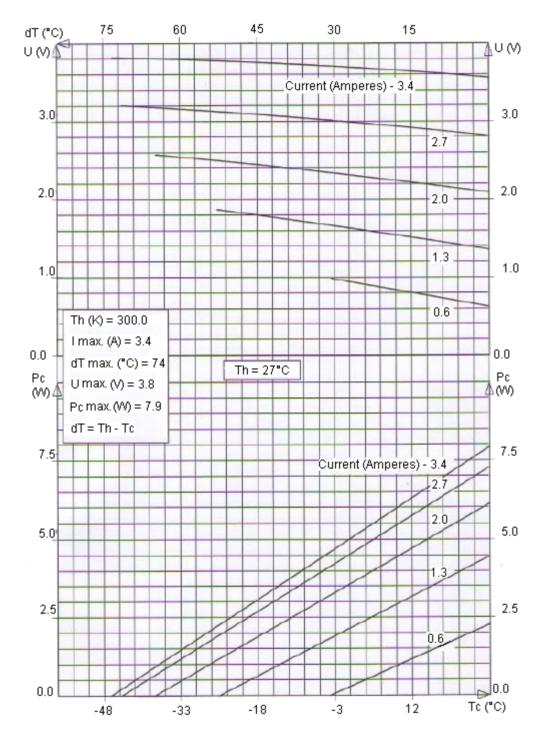
Dimensions : Millimetres



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Performance Graph



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