

Thermoelectric Module

Scope

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

Specifications

Parameters			Remarks
Internal resistance	$1 \Omega \pm 10\%$		Note-1
I max.	12 A		Note-2
V max.	15.4 V		Note-3
-	Th = 27°C	Th = 50°C	-
Q max.	110 W	123 W	Note-4
ΔT max.	68°C	75°C	Note-5
Solder melting point	138°C		Note-6
Maximum compress	98.07 N / cm ² (10 kgf / cm ²)		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 $\Delta T = 0^\circ\text{C}$

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:

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 0.02 mm

For optimum reliability and performance it is recommended that the module be utilised < 0.7 I max.

Silicone sealed for moisture protection

Specification Table

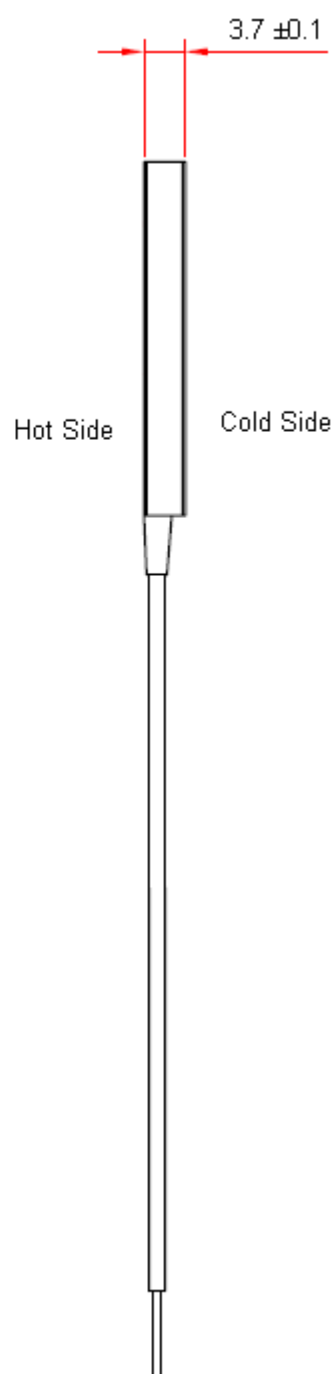
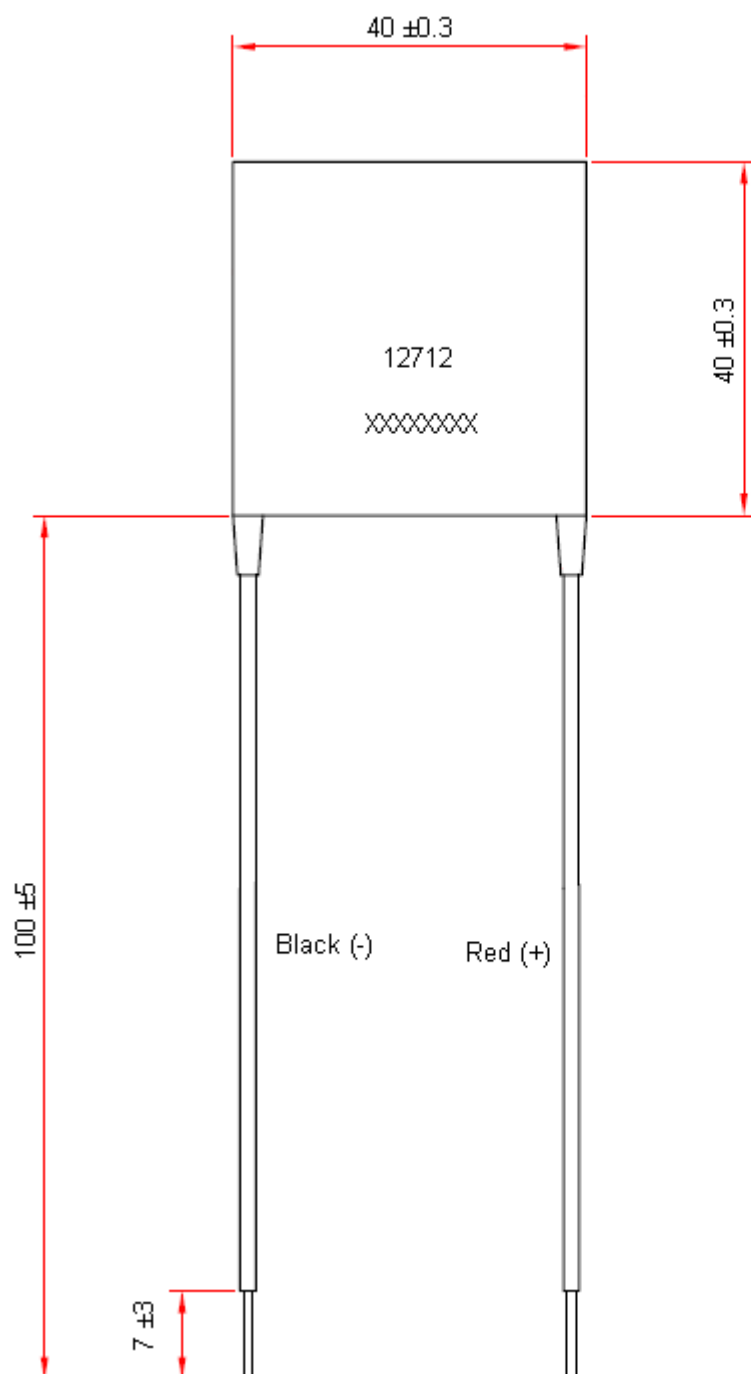
Thot = 27°C

I max. (A)	U max. (V)	Qc max. W	dT max. °C	A	B	H	Part Number
12	15.4	110	68	40	40	3.7	MCTE1-12712L-S

Dimensions : Millimetres

Thermoelectric Module

Outline Drawing



Dimensions : Millimetres