

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	1.59 Ω \pm 10%	Note-1
I max.	8.5 A	Note-2
V max.	15.7 V	Note-3
-	Th = 25°C	-
Q max.	79 W	Note-4
Δ T max.	70°C	Note-5
Solder melting point	232°C	Note-6
Maximum compress	1 MPa	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 = 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: 200°C

Operation temperature up to 150°C for long lifetime;

Long lifetime in power cycling mode with polarity change

Recommended operation current not higher than 0.7 of I max.

Preferable application; thermal management / cycling at high temperatures

E modules are epoxy sealed for moisture protection

Specification Table

Thot = 27°C

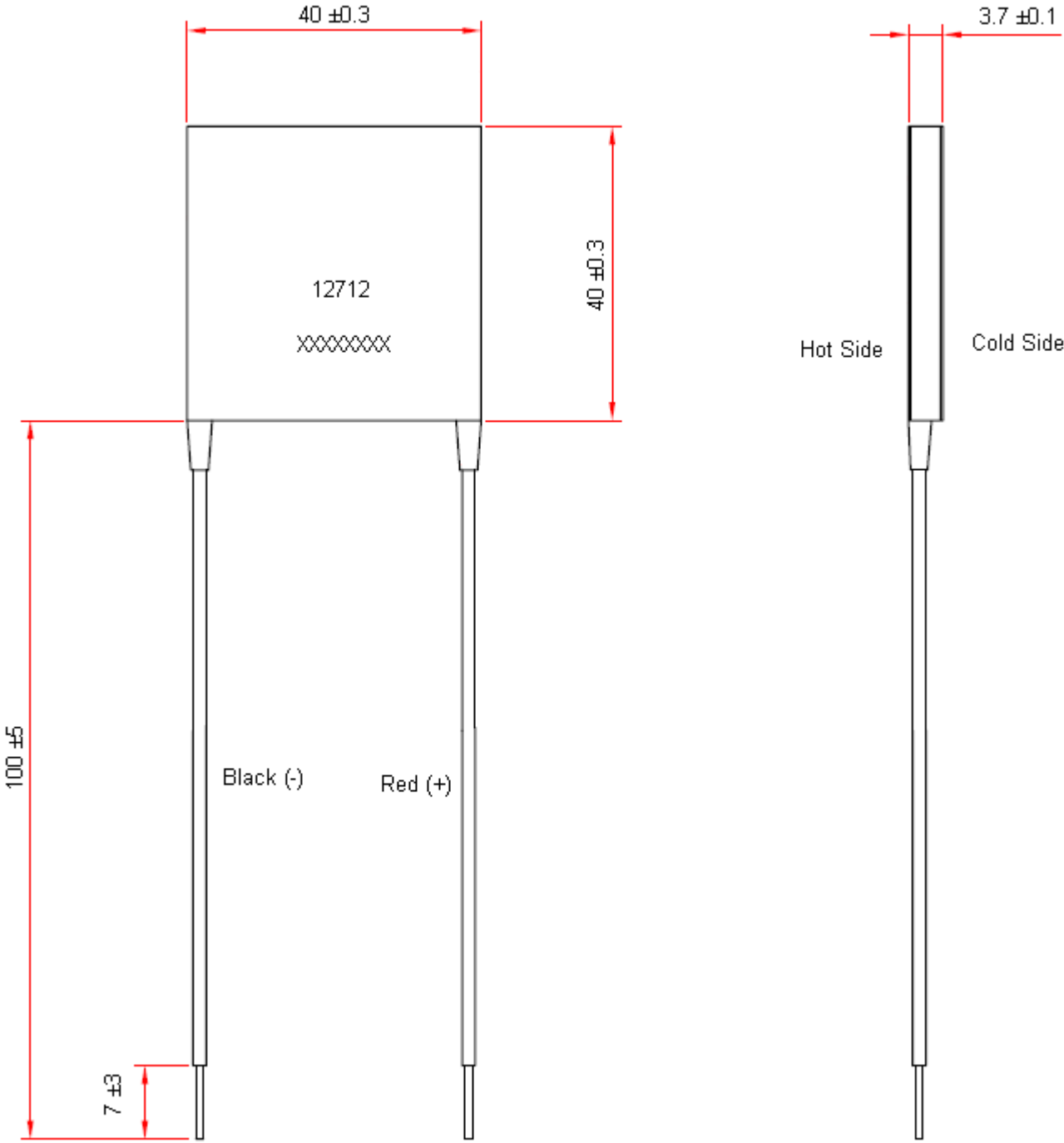
I max. (A)	U max. (V)	Qc max. W	dT max. °C	A	B	H	Part Number
8.5	15.7	79	70	40	40	3.8	MCPF-127-14-11-E

Dimensions : Millimetres

Thermoelectric Module



Outline Drawing



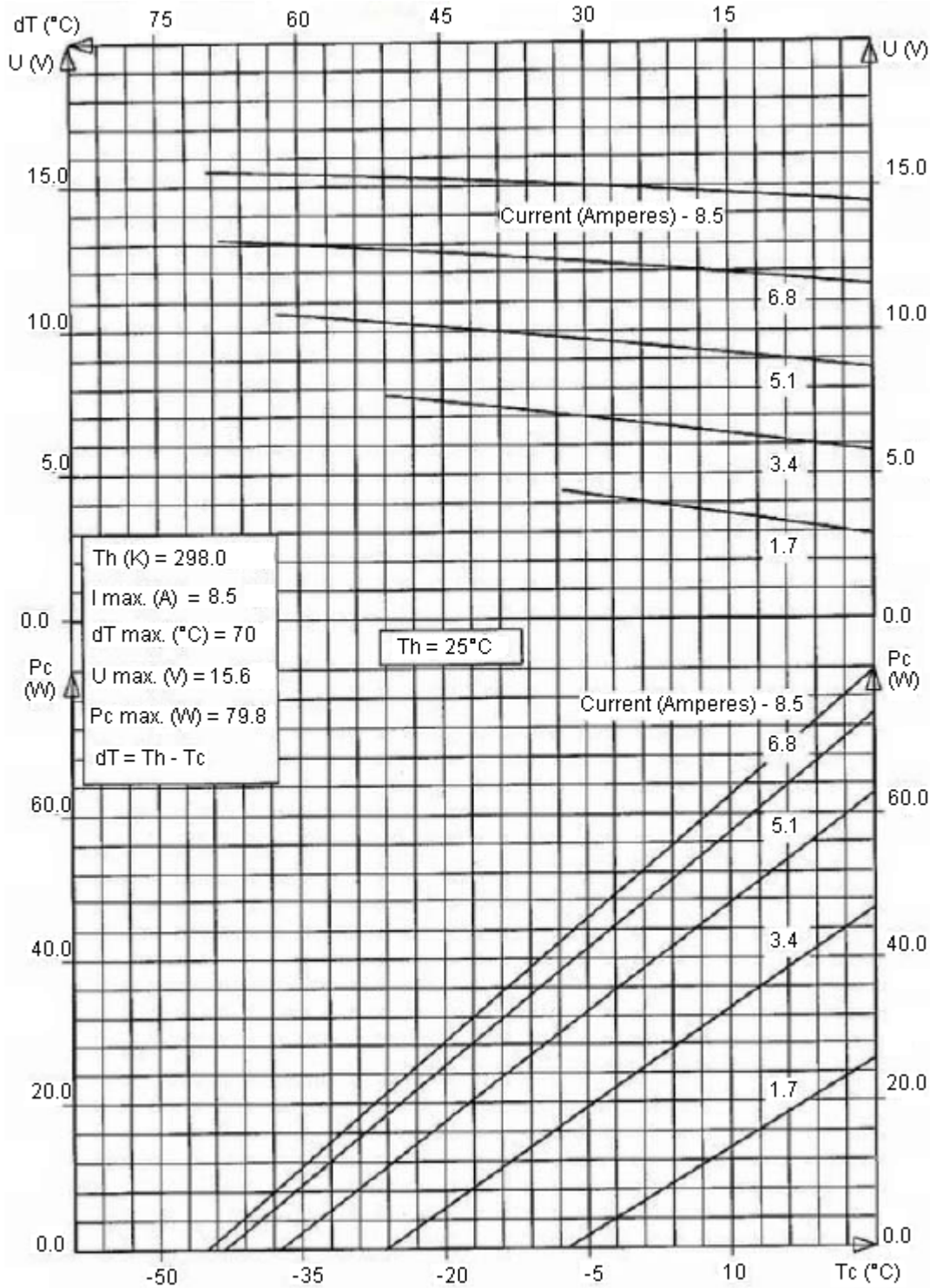
Dimensions : Millimetres



Thermoelectric Module



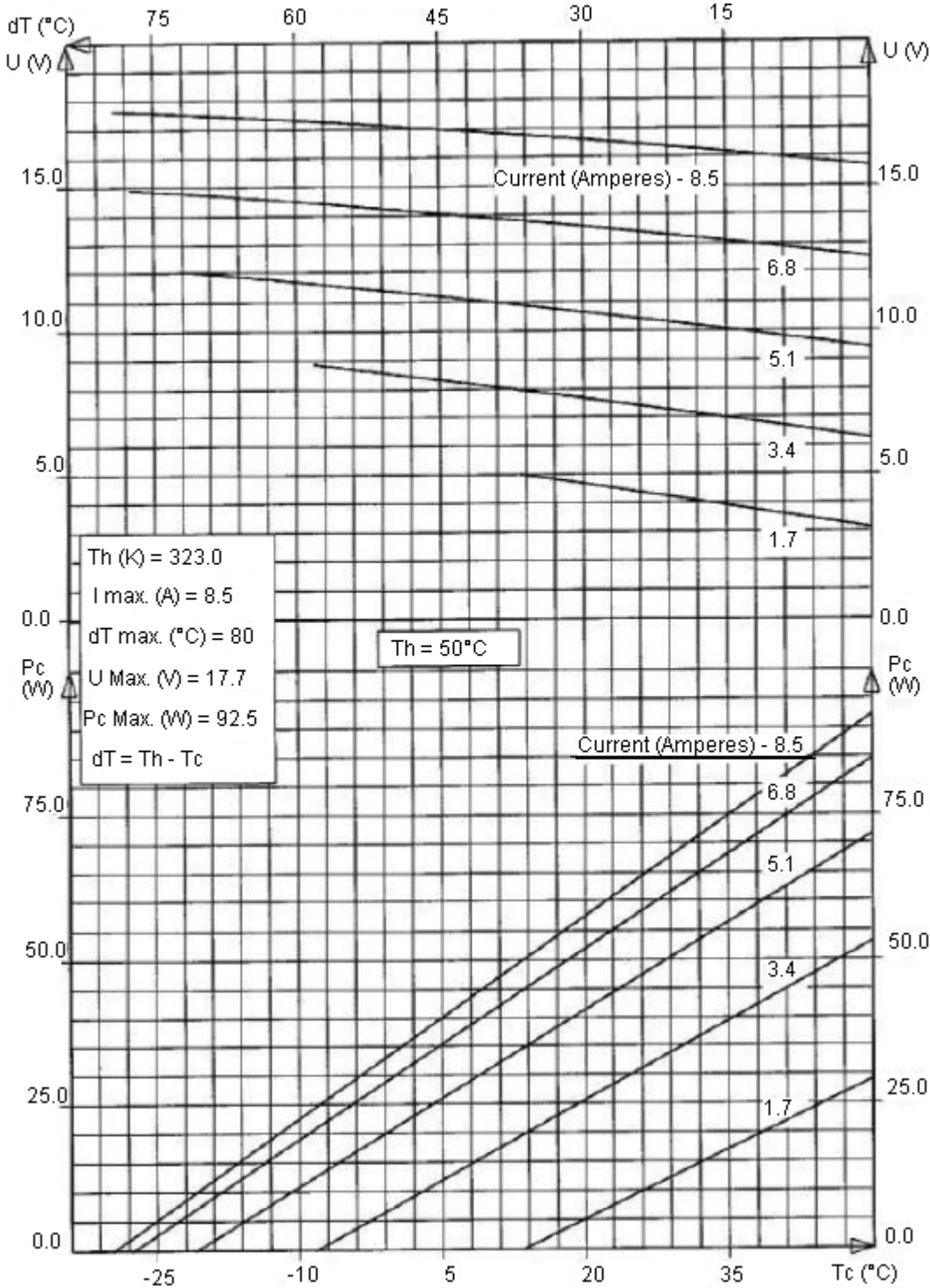
Performance Graph (298K and 323K Respectively)



Thermoelectric Module



Performance Graph (298K and 323K Respectively)



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