### 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	0.95 Ω	Note-1	
I max.	3.9	Note-2	
V max.	3.8	Note-3	
-	Th = 25°C	-	-
Q max.	8.5 W	-	Note-4
ΔT max.	72°C	-	Note-5
Solder melting point	138	Note-6	
Maximum compress	1 N	Note-7	

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

Note-2 Maximum current at  $\Delta T$  max.

Note-3 Maximum voltage at  $\Delta T$  max.

Note-4 Maximum cooling capacity at I max. V max. and  $\Delta T = 0$ °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 : 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 = 27°C

I max. (A)	U max. (V)	Qc max. W	dT max. °C	Α	В	н	Part Number
3.9	3.8	8.8	74	15	15	3.6	MCPE-031-10-13

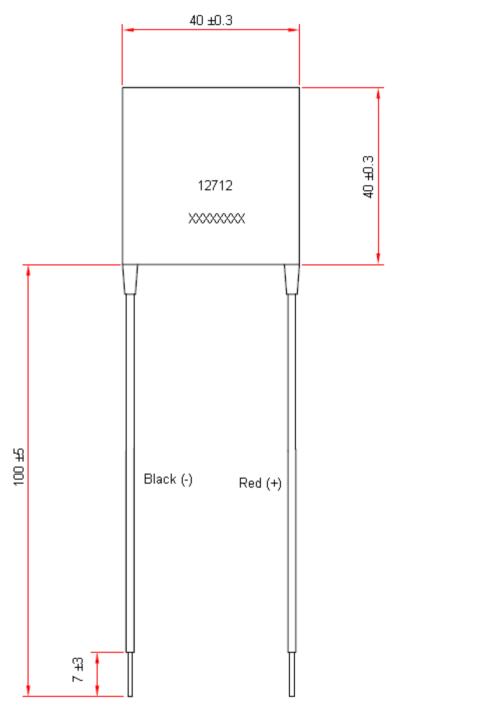
Dimensions: Millimetres



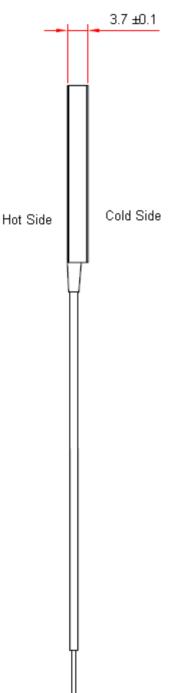
# **Thermoelectric Module**



### **Outline Drawing**



Page <2>

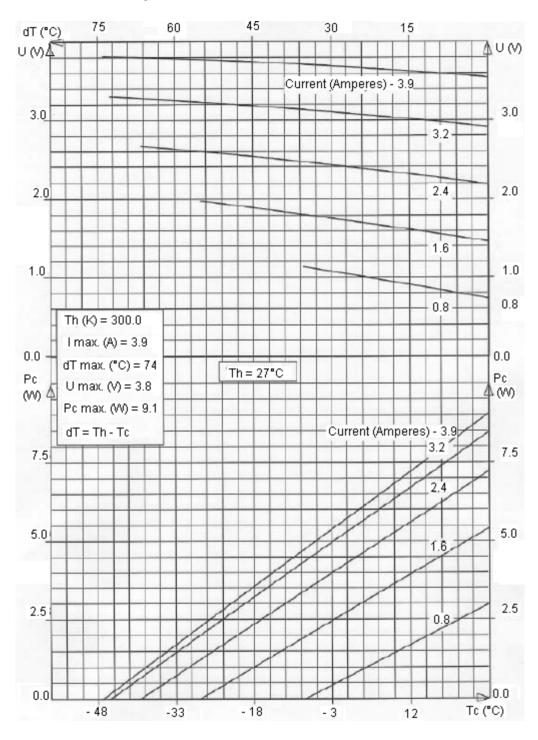


Dimensions : Millimetres

## Thermoelectric Module



#### **Performance Graph**



Important Notice: This data sheet and its contents (the "Information") belong to the members of the Premier Farnell group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp is the registered trademark of the Group. © Premier Farnell plc 2011.

www.element14.com www.farnell.com www.newark.com

