

## Scope

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

## Specification

### 1. Parameters

Parameters		Remarks	
Internal resistance	2.35Ω ± 10%	Note-1	
I <sub>max.</sub>	8.5A	Note-2	
V <sub>max.</sub>	24.1V	Note-3	
	Th=25°C	Th =50°C	
Q <sub>max.</sub>	118W	132W	Note-4
ΔT <sub>max.</sub>	68°C	75°C	Note-5
Solder melting point	138°C		Note-6
Max. Compress.	98.07N/cm <sup>2</sup> (10 kgf/cm <sup>2</sup> )		Note-7

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

Note-2 Maximum current at ΔT<sub>max.</sub>

Note-3 Maximum voltage at ΔT<sub>max.</sub>

Note-4 Maximum cooling capacity at I<sub>max.</sub>, V<sub>max.</sub> and ΔT = 0°C.

Note-5 Maximum temperature difference at I<sub>max.</sub>, V<sub>max.</sub> and Q = 0W.  
(Maximum parameters are measured in a vacuum 1.3P)

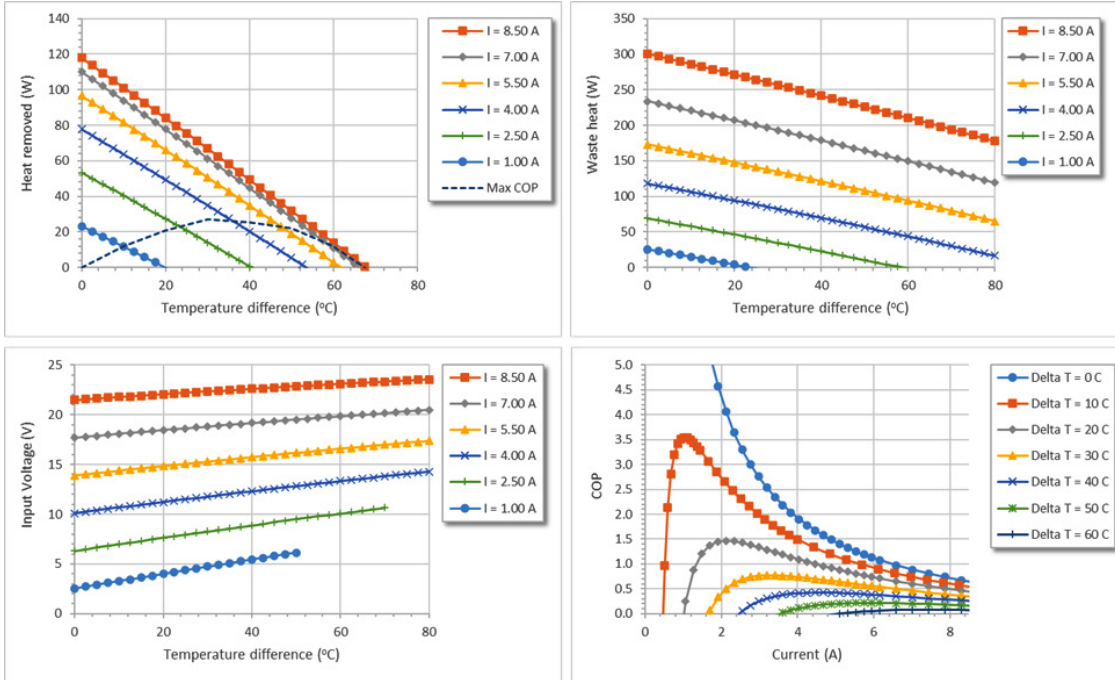
Note-6 The solder melting point of thermoelectric module

Note-7 Recommended maximum compression (not destruction limit)

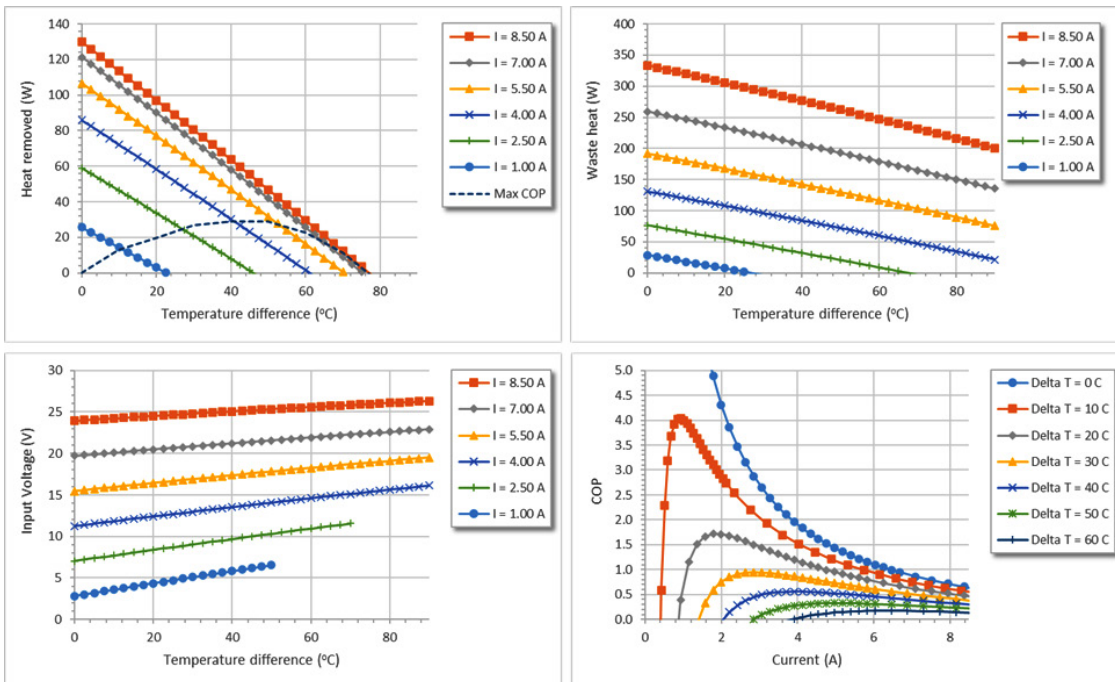
### 2. Recommendations

- 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 0.02mm
- For optimum reliability and performance it is recommended that the module be utilised <0.7 I<sub>max</sub>

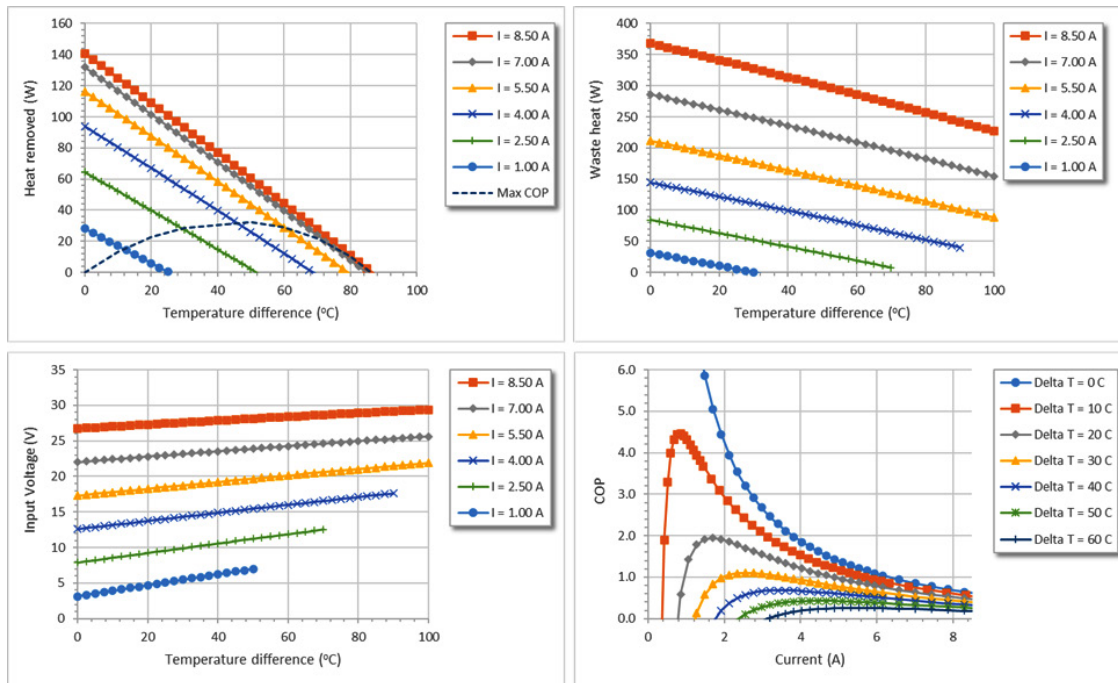
## Hot side temperature 27°C



## Hot side temperature 50°C



## Hot side temperature 75°C



### Part Number Table

Description	Part Number
Peltier Cooler, 118W	MCTE1-19908L-S

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