

# **Peltier Cooler**





## 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
lmax.	8.5A		Note-2
Vmax.	24.1V		Note-3
	Th=25°C	Th =50°C	
Qmax.	118W	132W	Note-4
ΔTmax.	68°C	75°C	Note-5
Solder melting point	138°C		Note-6
Max. Compress.	98.07N/cm² (10 kgf/cm²)		Note-7

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

Note-2 Maximum current at ΔTmax.

Note-3 Maximum voltage at ΔTmax.

Note-4 Maximum cooling capacity at Imax.,Vmax. and  $\Delta T = 0$ °C.

Note-5 Maximum temperature difference at Imax., Vmax. 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)







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#### 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 Imax

## **Part Number Table**

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



