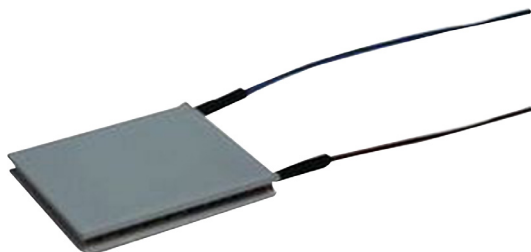


# Peltier Cooler



## 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	$1.59\Omega \pm 10\%$		Note-1
I <sub>max.</sub>	8.5A		Note-2
V <sub>max.</sub>	15.7V		Note-3
	Th=25°C		
Q <sub>max.</sub>	79W		Note-4
$\Delta T_{max.}$	70°C		Note-5
Solder melting point	232°C		Note-6
Max. Compress	1MPa		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<sub>max.</sub>, V<sub>max.</sub> and  $\Delta T = 0^\circ\text{C}$ .

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.

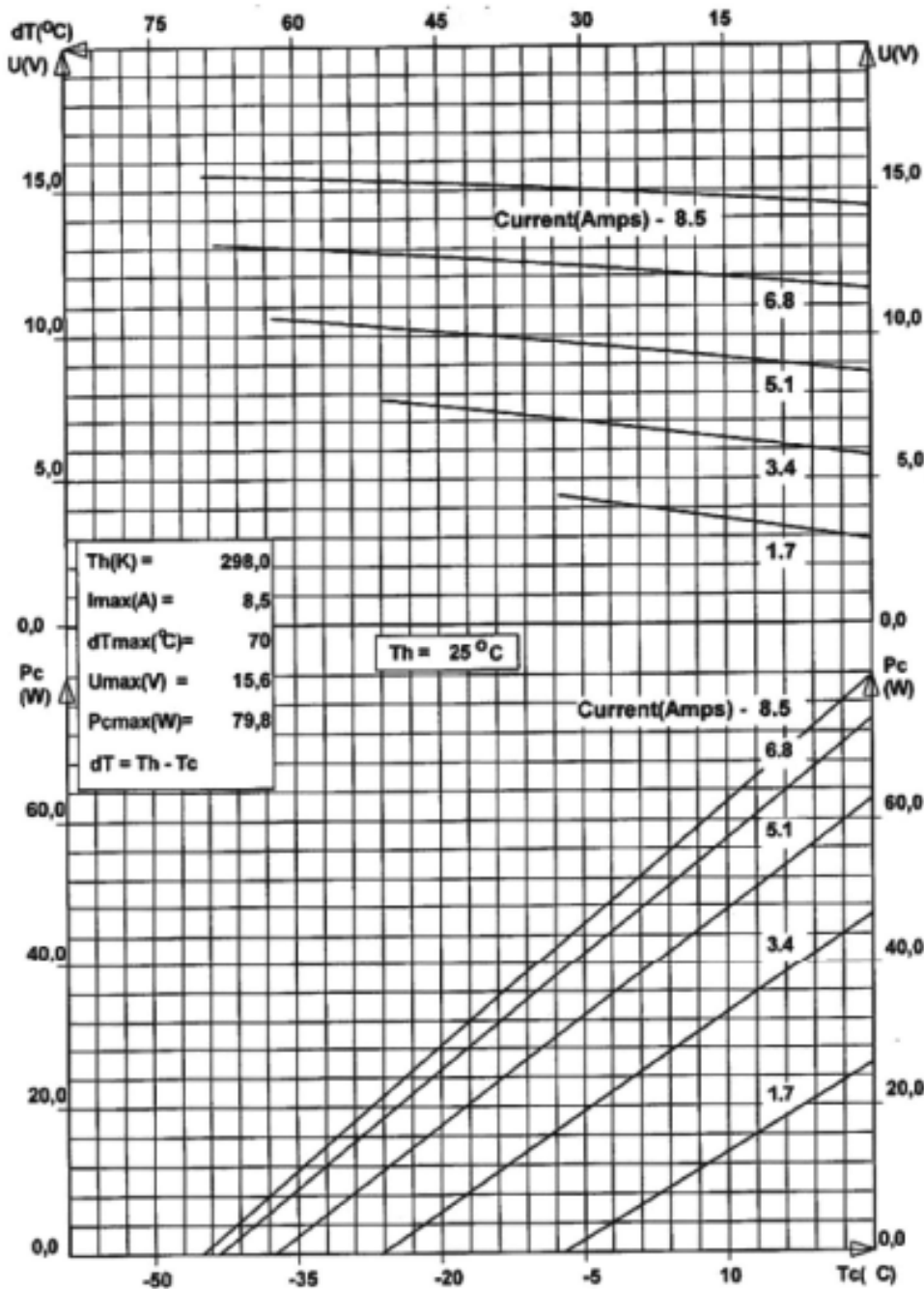
Note-7 Recommended maximum compression (not destruction limit).

### 2. Recommendations

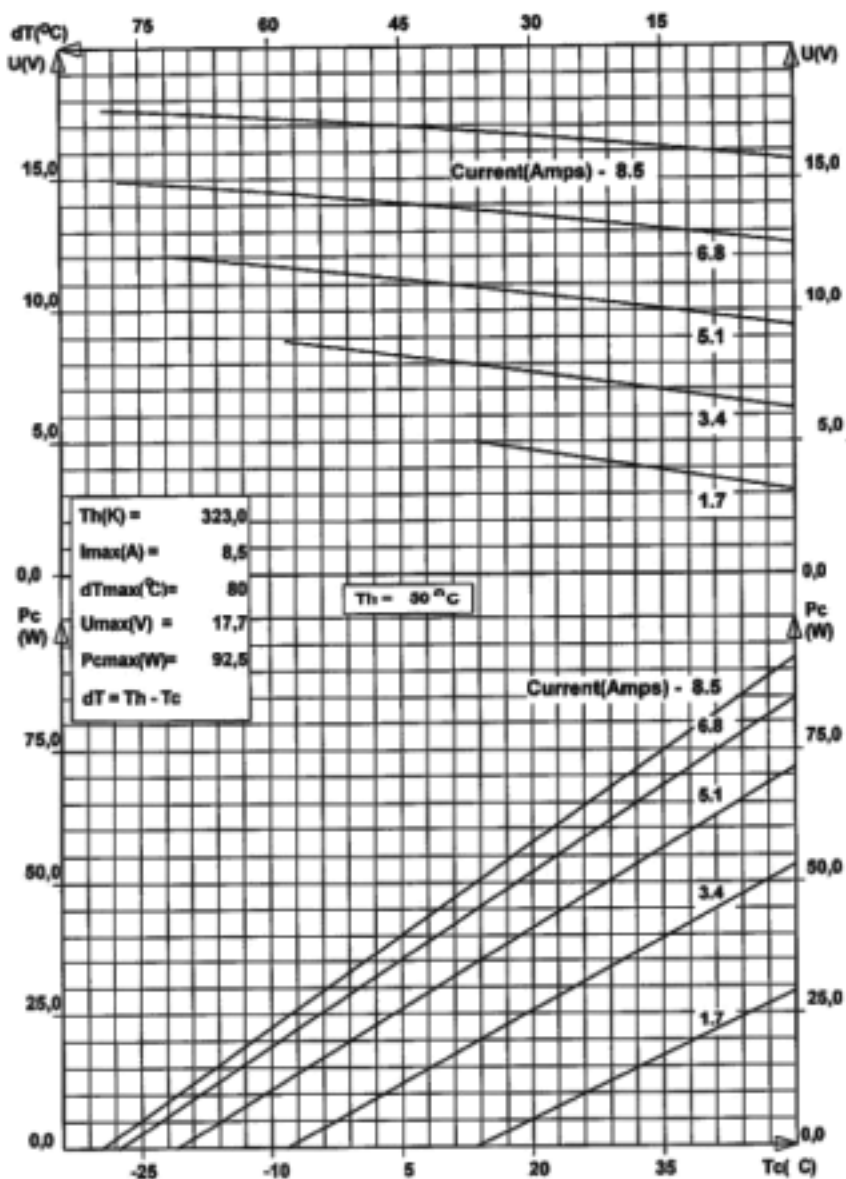
- Maximum temperature for short time: 200 °C
- Operation temperature up to 150°C for long lifetime;
- Long lifetime in power cycling mode with polarity change
- Recommended operation current not higher than 0.7 of I<sub>max</sub>
- Preferable application; thermal management / cycling at high temperatures

# Peltier Cooler

## 3. Performance Graph



# Peltier Cooler



Part Number Table

Description	Part Number
Peltier Cooler, 79W	MCPF-127-14-11-E