

Feature

Transducer Function: Thermoelectric modules

Specifications

Parameters		Remarks
Internal resistance	0.85Ω ± 10%	Note-1
I _{max.}	15.4A	Note-2
V _{max.}	15.7V	Note-3
-	Th=25°C	-
Q _c max.	150W	Note-4
ΔT _{max.}	68°C	Note-5
Solder Melting Point	138°C	Note-6
Max. Compress	1MPa	Note-7
Operating Temperature	-90°C to +110°C	
External Depth	3.8mm	
External Length / Height	30mm	

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

Note-2 Max. current at ΔT_{max}

Note-3 Max. voltage at ΔT_{max}

Note-4 Max. cooling capacity at I_{max.}, V_{max.} and ΔT=0°C

Note-5 Max. temperature difference at I_{max.}, V_{max.} and Q=0W
(Maximum parameters are measured in a vacuum 1.3P)

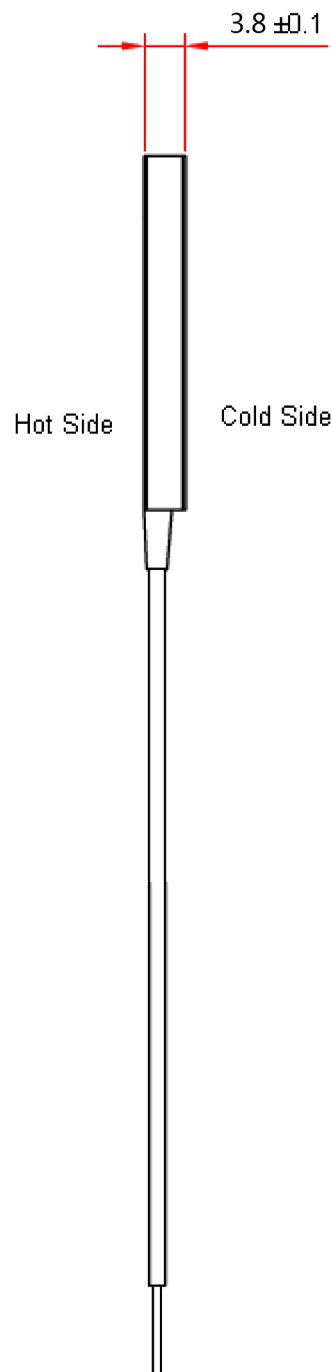
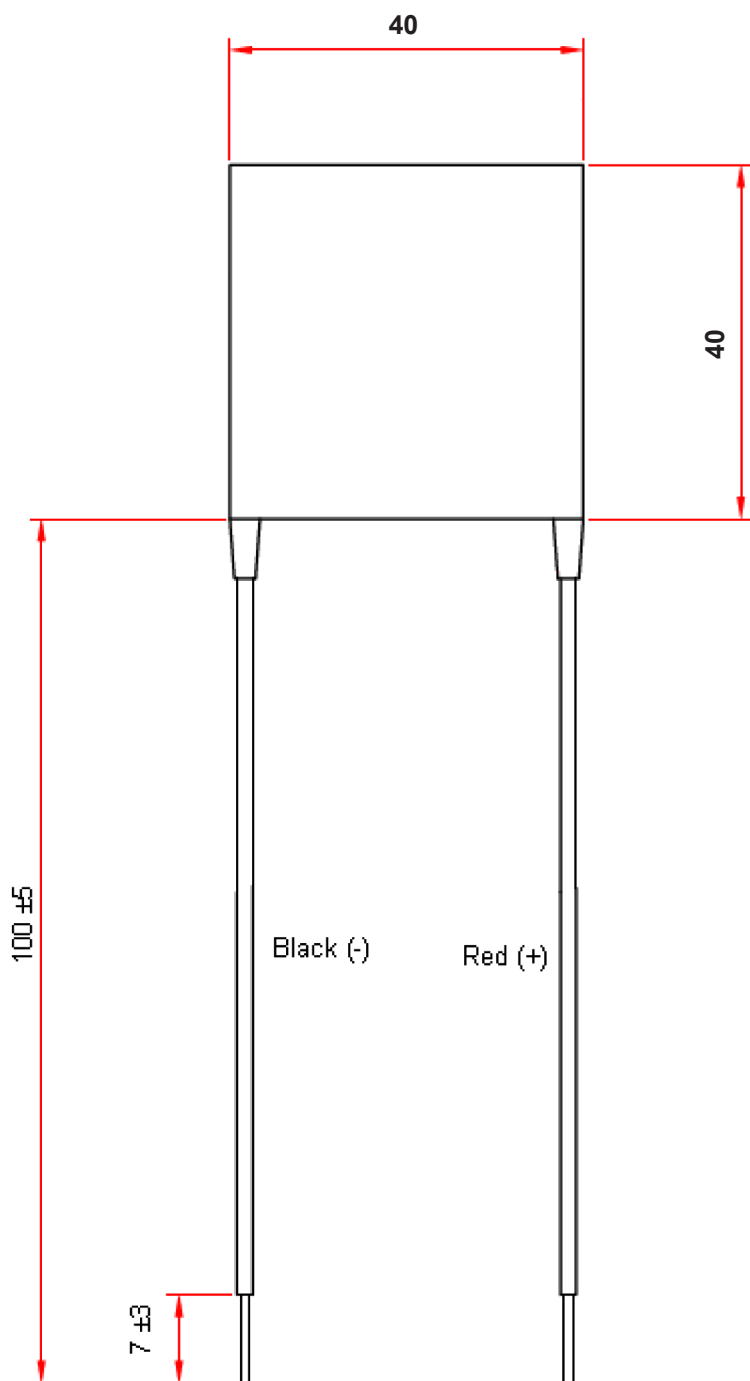
Note-6 The solder melting point of thermoelectric module

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

Recommendations

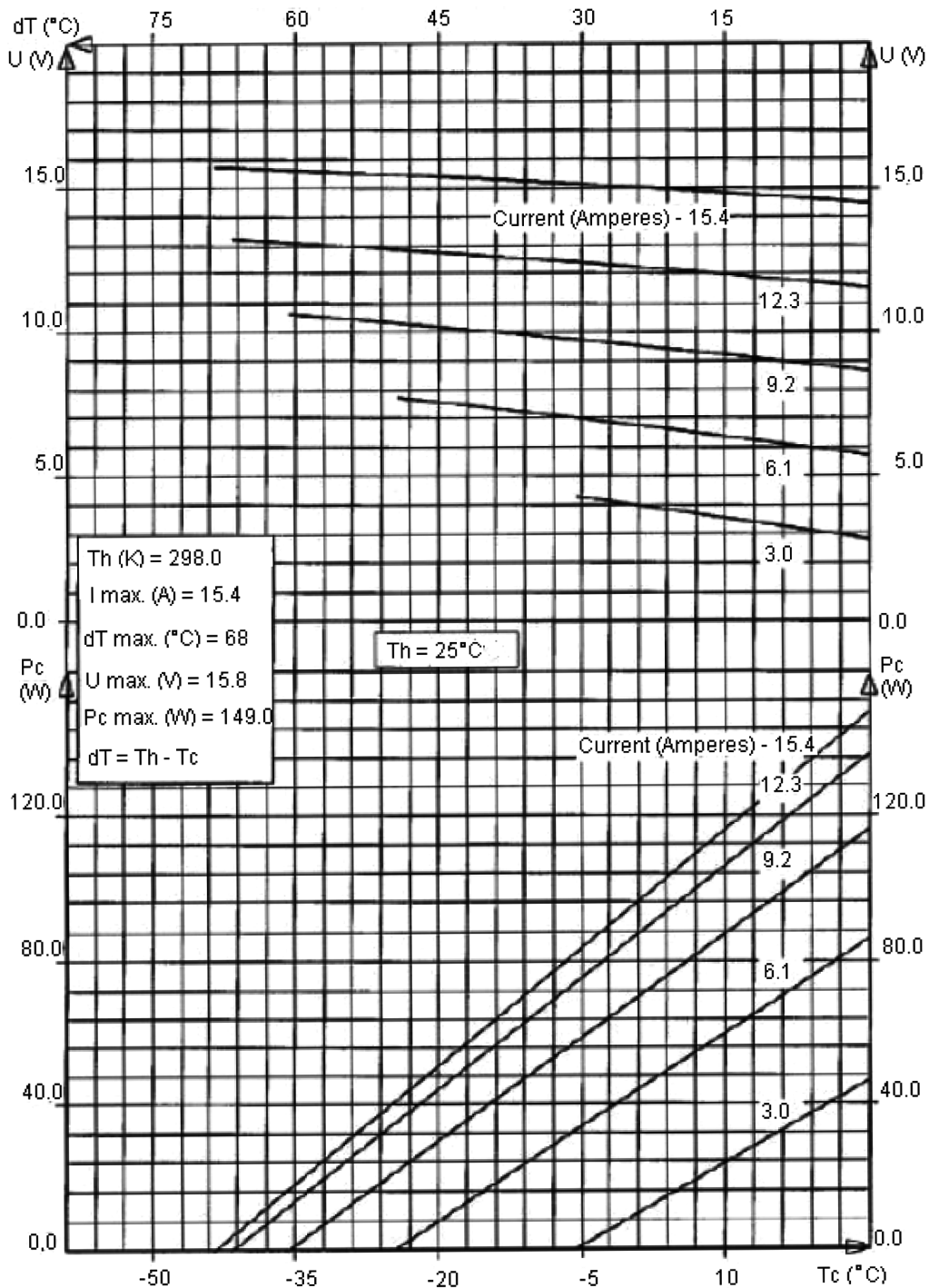
- High cooling capacity from a small surface and long lifetime in power cycling applications with change of current polarity
- Operation temperature up to 90°C for long lifetime; up to 110°C for short periods
- With operation current close to 0.5 I_{max.} extremely high COP (coefficient of performance possible)
- Preferable application; high cooling capacity at high temperatures / cycling
- Epoxy sealed for moisture protection

Outline Drawing

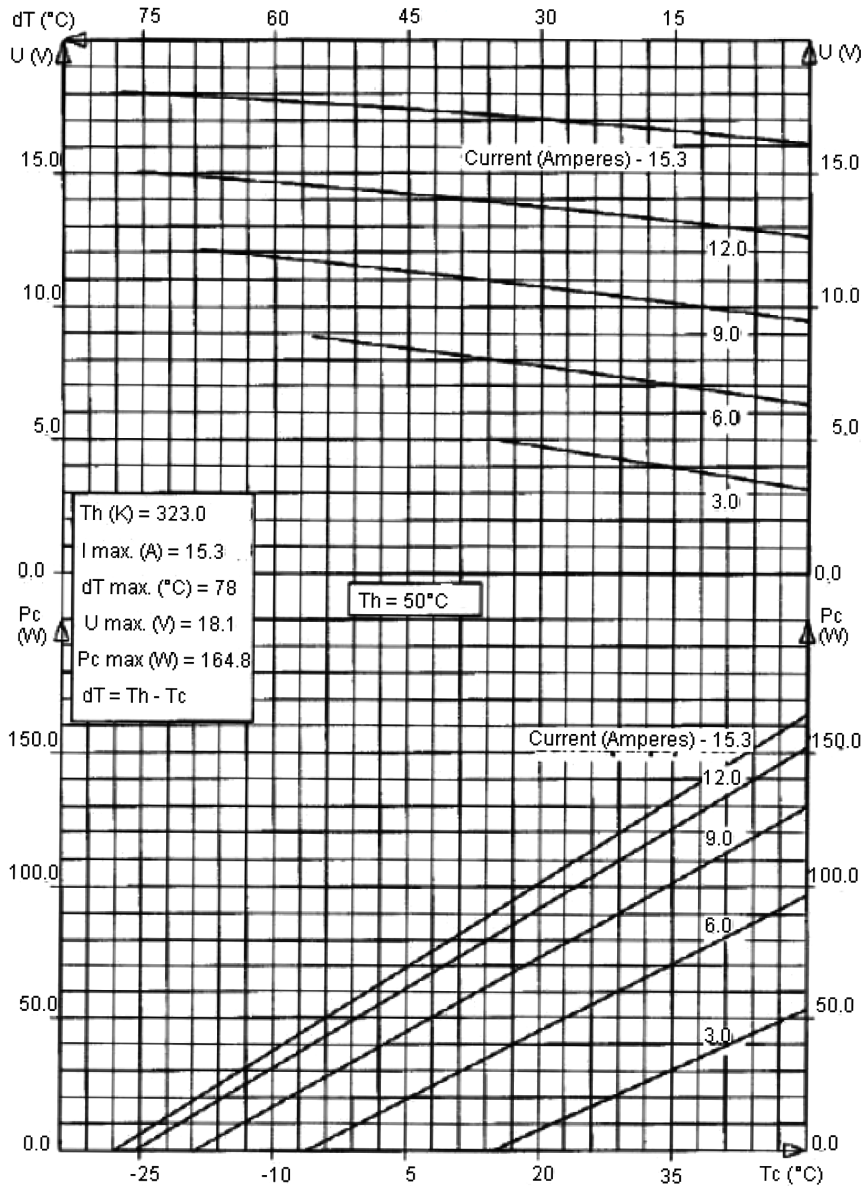


Dimensions : Millimetres

2-3 Performance Graph (298K)



2-4 Performance Graph (323K)



Part Number Table

Description	Part Number
Peltier Cooler, 150W	MCHPE-127-14-06-E

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