





Feature

Transducer Function: Thermoelectric modules

Specifications

| Parameters | | | Remarks |
|--------------------------|-----------------|---|---------|
| Internal resistance | 0.85Ω ± 10% | | Note-1 |
| lmax. | 15.4A | | Note-2 |
| Vmax. | 15.7V | | Note-3 |
| - | Th=25°C | - | - |
| Qc max. | 150W | - | Note-4 |
| ΔTmax. | 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 ∆Tmax

Note-4 Max. cooling capacity at Imax.,Vmax. and ΔT=0°C

Note-5 Max. 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 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

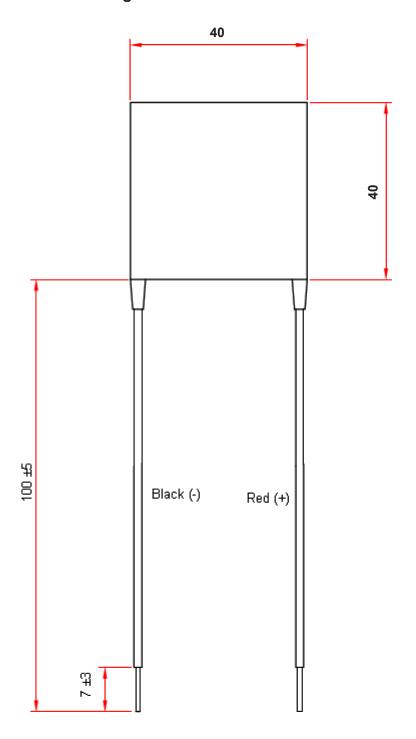


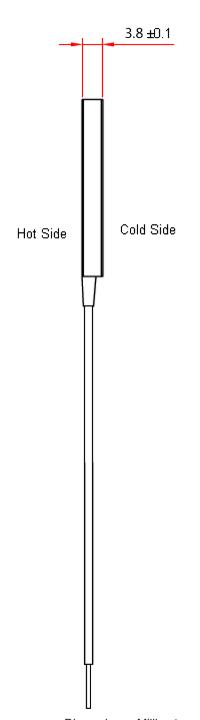






Outline Drawing





Dimensions : Millimetres

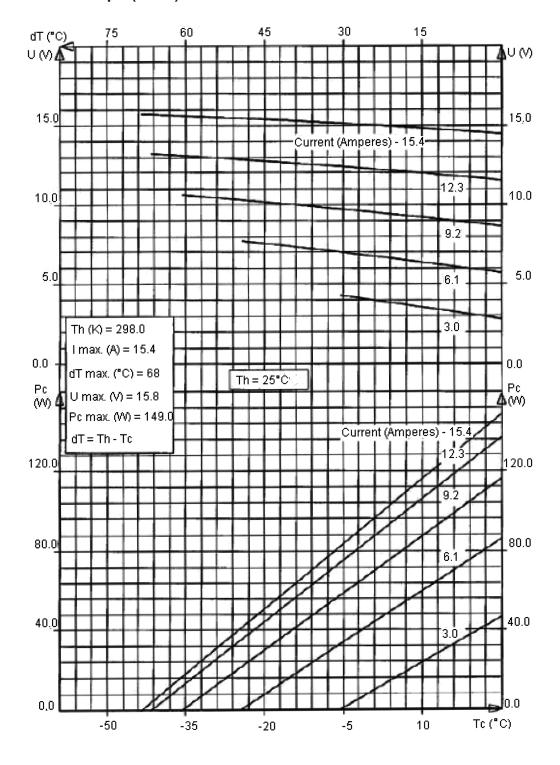






multicomp

2-3 Performance Graph (298K)



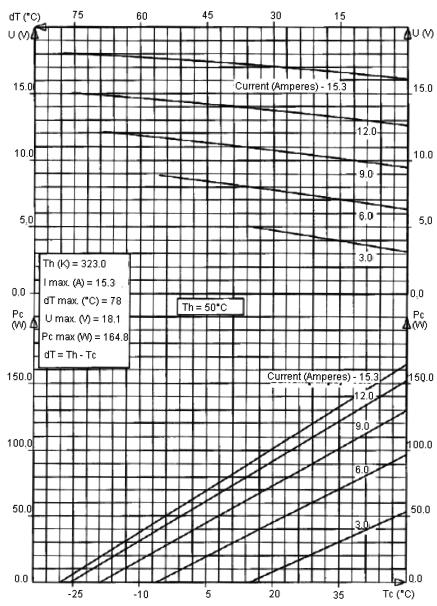








2-4 Performance Graph (323K)



Part Number Table

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



