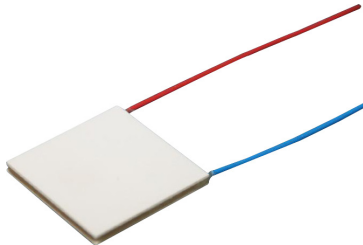


# Peltier Cooler



## Specification:

| Parameters           |                        | Remarks |
|----------------------|------------------------|---------|
| Internal Resistance  | $1.5\Omega \pm 10\%$   | Note-1  |
| I Max.               | 8.5A                   | Note-2  |
| V Max.               | 15.7V                  | Note-3  |
| -                    | Th = 27°C    Th = 50°C | -       |
| Q Max.               | 15.7 W    85 W         | Note-4  |
| $\Delta T$ Max.      | 70°C    77°C           | Note-5  |
| Solder melting point | 235°C                  | Note-6  |
| Max. compress        | 1MPa                   | Note-7  |

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

Note-2 Max. current at T Max.

Note-3 Max. voltage at T Max.

Note-4 Max. cooling capacity at I max., V max. and  $\Delta T = 0^\circ\text{C}$

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

Note-6 The solder melting point of thermoelectric module

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

## Recommendations:

Operating range :  $-40^\circ\text{C}$  to  $+100^\circ\text{C}$

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 0.02 mm

For optimum reliability and performance it is recommended that the module be utilised  $<0.7$  I maximum

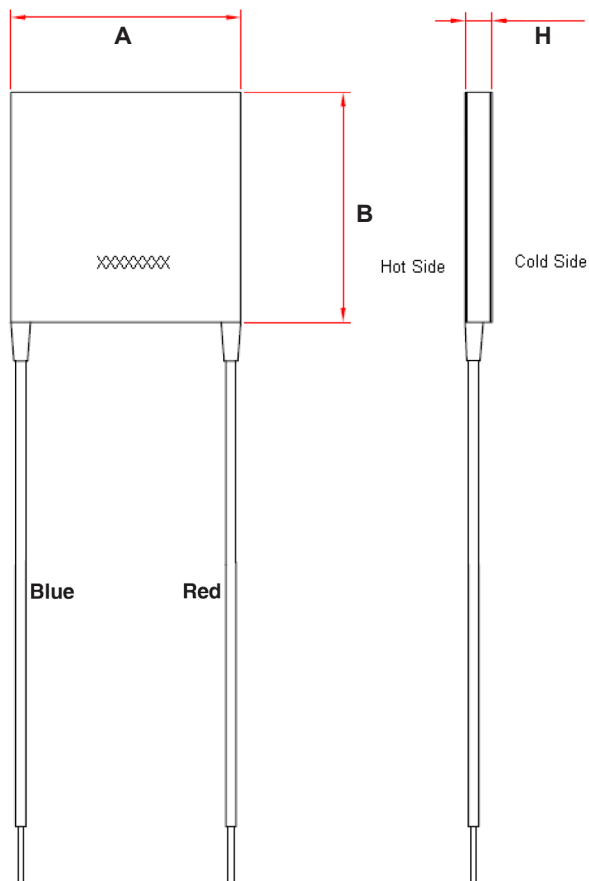
## Specification Table:

$T_{\text{hot}} = 27^\circ\text{C}$

| I max. (A) | U max. (V) | Qc max. W | dT max. °C |
|------------|------------|-----------|------------|
| 8.5        | 15.7       | 77.1      | 70         |

# Peltier Cooler

## Outline Drawing



Dimensions Table

| A    | B    | H      |
|------|------|--------|
| 40mm | 40mm | 3.45mm |

Part Number Table

| Description           | Part Number     |
|-----------------------|-----------------|
| Peltier Cooler, 77.1W | MCPE1-12708AC-S |