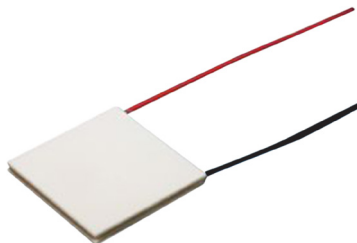


# Thermoelectric Module



## Scope:

This specification is applied to multicomp thermoelectric modules  
Revision of these specifications is carried out after consent.

## Specifications:

Parameters		Remarks
Internal resistance	$1.4\Omega \pm 10\%$	Note-1
I max.	13A	Note-2
V max.	24.1V	Note-3
-	Th = 27°C      Th = 50°C	-
Q max.	200W      224W	Note-4
$\Delta T$ max.	68°C      75°C	Note-5
Solder melting point	138°C	Note-6
Maximum compress	98.07N / cm <sup>2</sup> (10kgf / cm <sup>2</sup> )	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 max. V max. and  $\Delta T = 0^\circ\text{C}$

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

Note-6 : The solder melting point of thermoelectric module

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

## 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 <0.7I max.  
Silicone sealed for moisture protection



# Thermoelectric Module

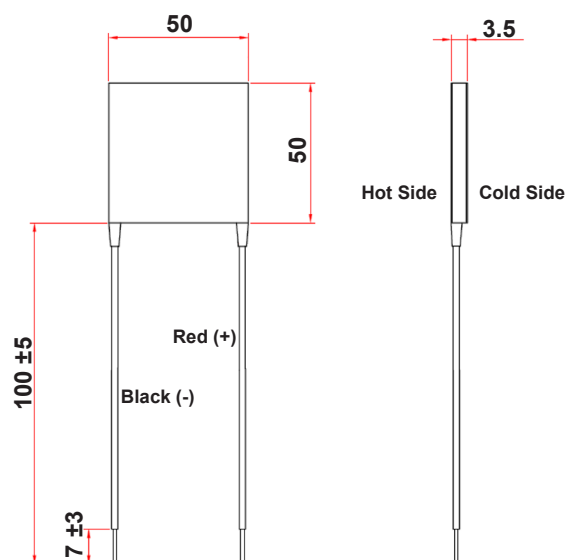
## Specification Table

Thot = 27°C

I max. (A)	U max. (V)	Qc max. W	dT max. °C	A	B	H	Part Number
13	24.1	200	68	50	50	3.5	MCTE1-19913L-S

Dimensions : Millimetres

## Outline Drawing:



Dimensions : Millimetres

## Cooling data for hot side temperature of 27°C

