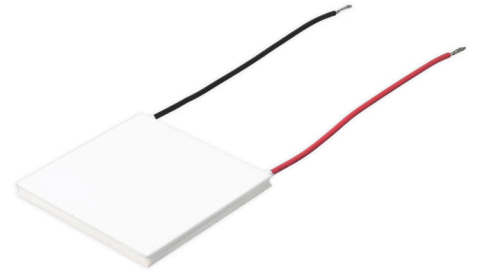




## SERIES: CP180 | DESCRIPTION: PELTIER MODULE

### FEATURES

- arcTEC™ structure
- enhanced reliability for high thermal cycling
- superior thermal performance
- silicon sealed
- wide  $\Delta T$  max
- precise temperature control
- solid state construction



### MODEL

	input voltage <sup>1</sup>	input current <sup>2</sup>	internal resistance <sup>3</sup>	output Qmax <sup>4</sup>		output $\Delta T$ max <sup>5</sup>	
	max [Vdc]	max [A]	typ [ $\Omega \pm 10\%$ ]	$T_h = 27^\circ\text{C}$ [W]	$T_h = 50^\circ\text{C}$ [W]	$T_h = 27^\circ\text{C}$ [ $^\circ\text{C}$ ]	$T_h = 50^\circ\text{C}$ [ $^\circ\text{C}$ ]
CP185039	15.4	18	0.66	157	172	68	75

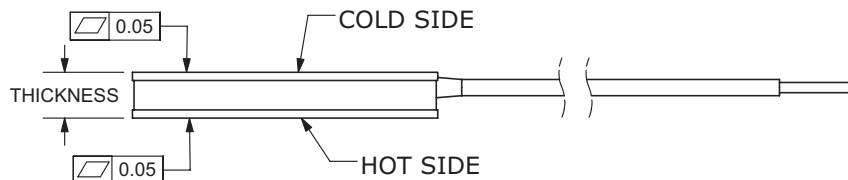
Notes: 1. Maximum voltage at  $\Delta T$  max and  $T_h = 27^\circ\text{C}$   
 2. Maximum current to achieve  $\Delta T$  max  
 3. Measured by AC 4-terminal method at  $25^\circ\text{C}$   
 4. Maximum heat absorbed at cold side occurs at  $I_{max}$ ,  $V_{max}$ , and  $\Delta T = 0^\circ\text{C}$   
 5. Maximum temperature difference occurs at  $I_{max}$ ,  $V_{max}$ , and  $Q = 0\text{W}$  ( $\Delta T$  max measured in a vacuum at 1.3 Pa)

## SPECIFICATIONS

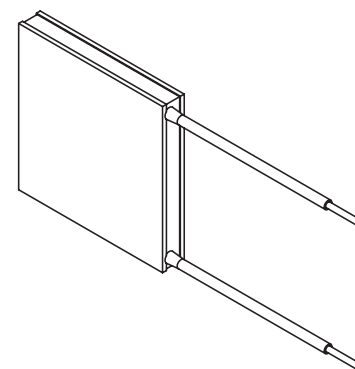
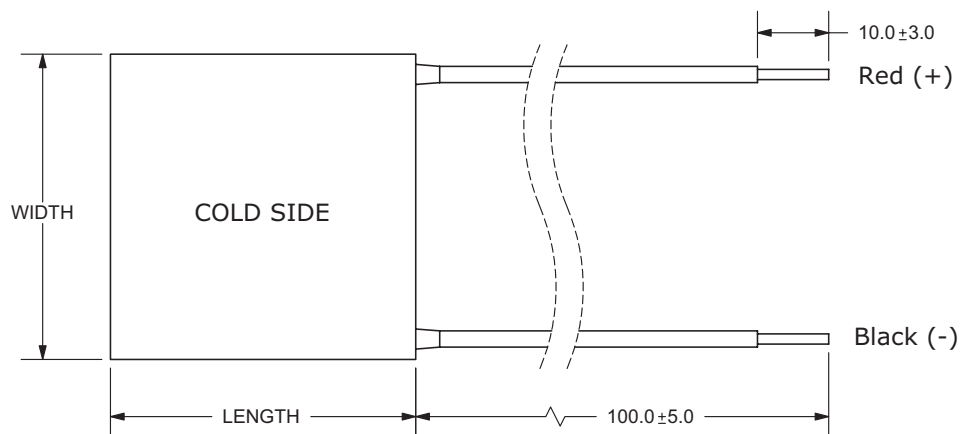
parameter	conditions/description	min	typ	max	units
solder melting temperature	connection between thermoelectric pairs	235			°C
assembly compression				1	MPa
RoHS	yes				

## MECHANICAL DRAWING

units: mm

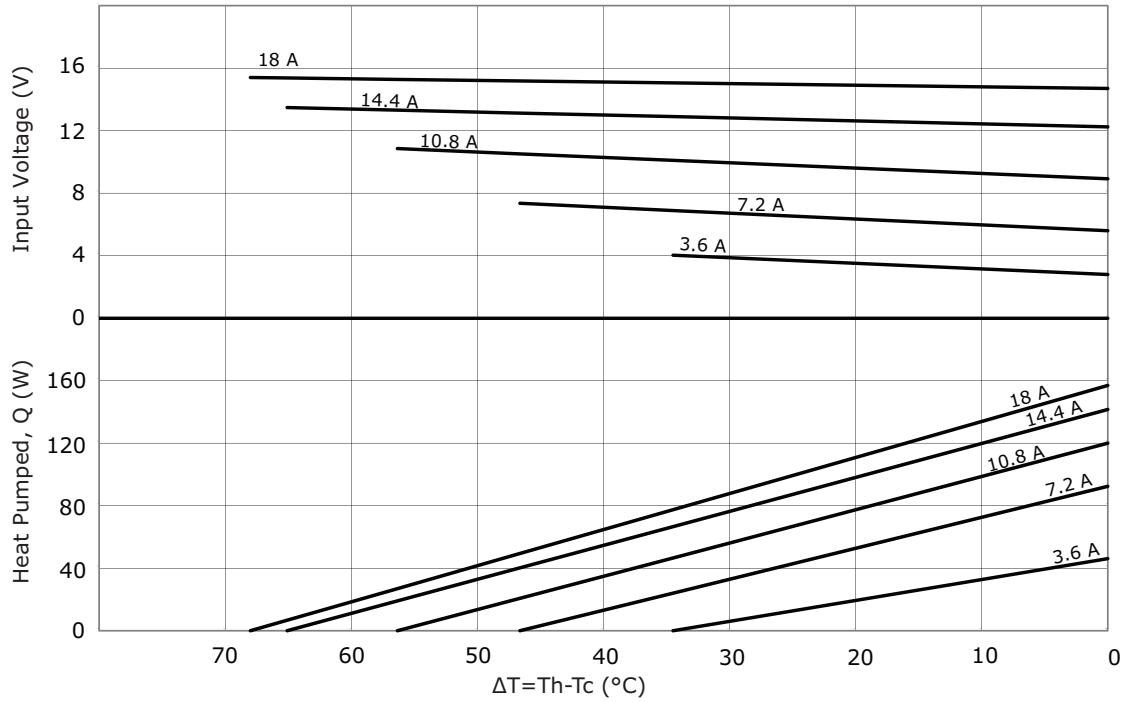


	MATERIAL	PLATING
ceramic plate	96% $Al_2O_3$	
wire leads	20 AWG	tin
sealer	silicon rubber 703 RTV (between cold and hot side plates)	
joint cover	silicon rubber 703 RTV	
marking	P/N & S/N printed on cold side surface	

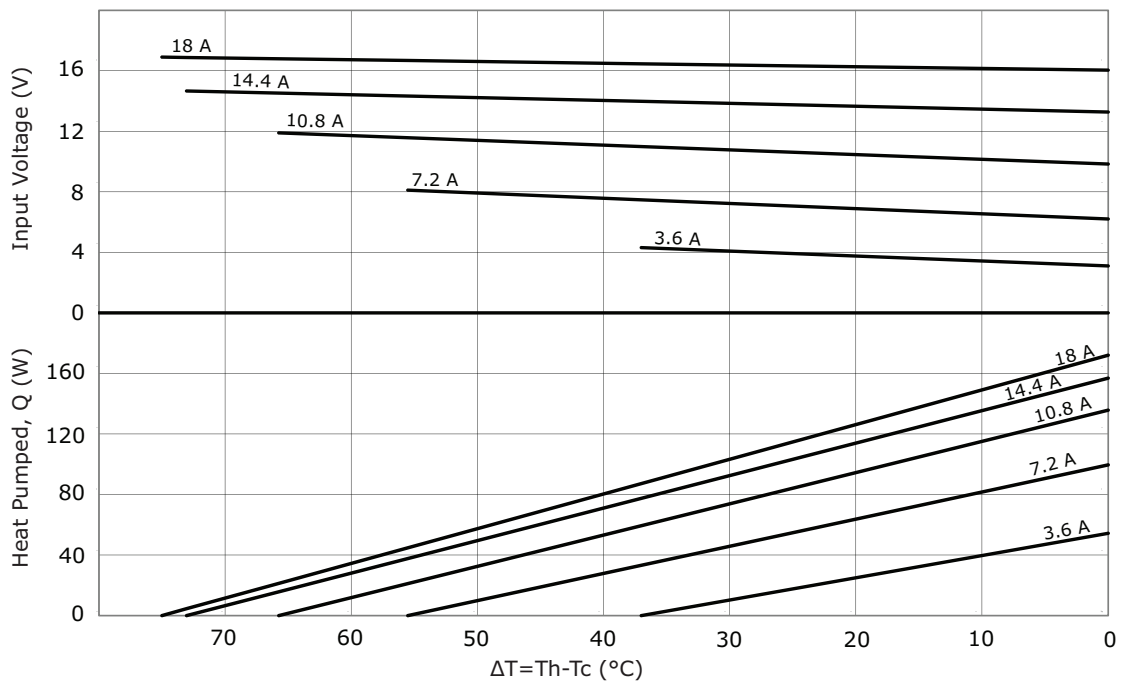


MODEL NO.	LENGTH (mm)	WIDTH (mm)	THICKNESS (mm)
CP185039	50 ± 0.3	50 ± 0.3	3.9 ± 0.025

## CP185039 PERFORMANCE (Th=27°C)



## CP185039 PERFORMANCE (Th=50°C)



## REVISION HISTORY

rev.	description	date
1.0	initial release	10/17/2019
1.01	logo, datasheet style update	08/05/2022

The revision history provided is for informational purposes only and is believed to be accurate.



CUI Devices offers a one (1) year limited warranty. Complete warranty information is listed on our website.

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