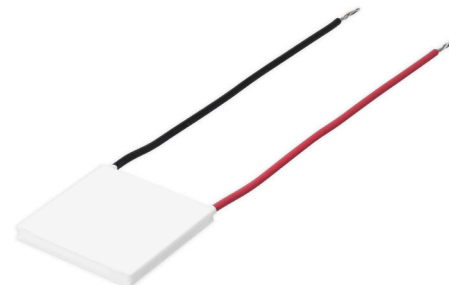


**SERIES:** CP100 | **DESCRIPTION:** PELTIER MODULE**FEATURES**

- 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> max (Vdc)	input current <sup>2</sup> max (A)	internal resistance <sup>3</sup> typ ( $\Omega \pm 10\%$ )	output Qmax <sup>4</sup>		output $\Delta T$ max <sup>5</sup>	
				T <sub>h</sub> =27°C (W)	T <sub>h</sub> =50°C (W)	T <sub>h</sub> =27°C (°C)	T <sub>h</sub> =50°C (°C)
CP103033	11.8	10	0.88	69	75	70	77
CP10415273	4.9	10	0.37	28	30	70	77
CP105559415	24.6	10	1.82	140	154	70	77

Notes:

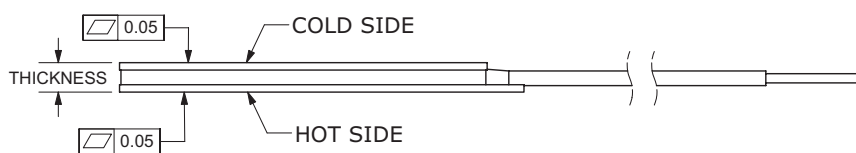
1. Maximum voltage at  $\Delta T$  max and T<sub>h</sub>=27°C
2. Maximum current to achieve  $\Delta T$  max
3. Measured by AC 4-terminal method at 25°C
4. Maximum heat absorbed at cold side occurs at I<sub>max'</sub>, V<sub>max'</sub>, and  $\Delta T=0^\circ\text{C}$
5. Maximum temperature difference occurs at I<sub>max'</sub>, V<sub>max'</sub>, and Q=0W ( $\Delta T$  max measured in a vacuum at 1.3 Pa)

## SPECIFICATIONS

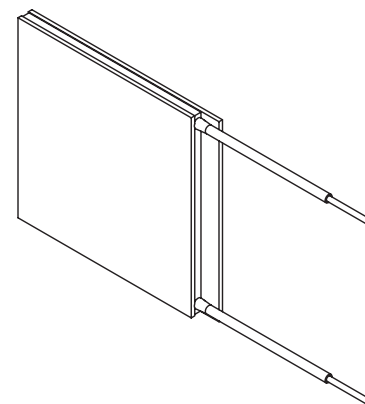
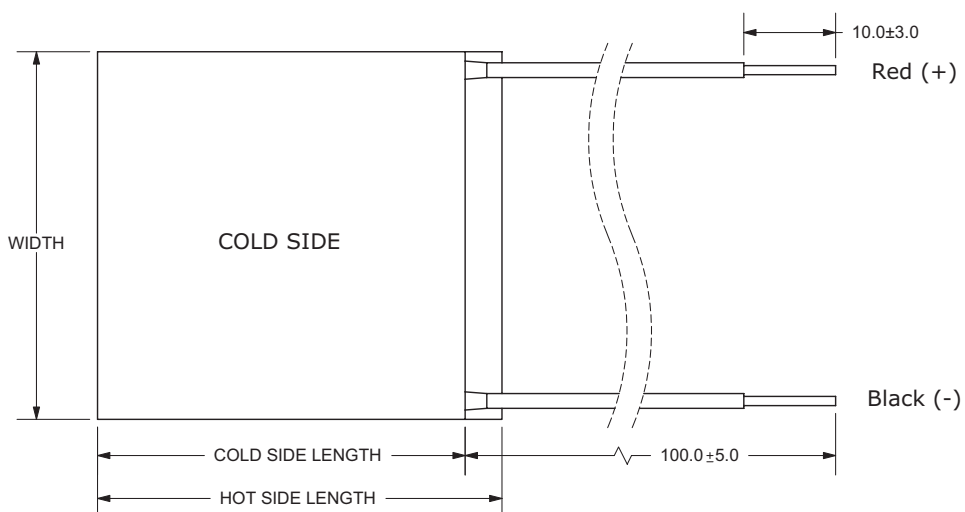
parameter	conditions/description	min	typ	max	units
solder melting temperature	connection between thermoelectric pairs	235			°C
assembly compression				1	MPa
RoHS	yes				

## MECHANICAL DRAWING

units: mm

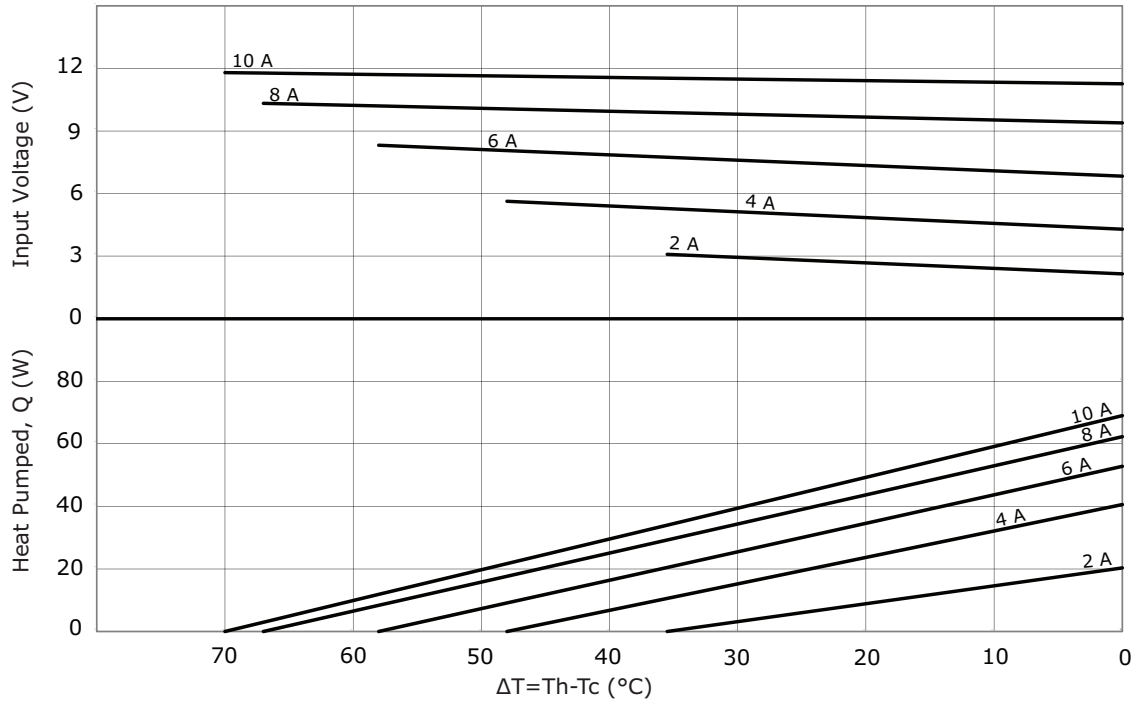


	MATERIAL	PLATING
ceramic plate	96% AL <sub>2</sub> O <sub>3</sub>	
wire leads (CP10415273)	18 AWG	tin
wire leads (all other models)	20 AWG	tin
sealer	silicon rubber 703 RTV (between cold and hot side plates)	
joint cover	silicon rubber 703 RTV	
marking	P/N & S/N printed on cold side surface	

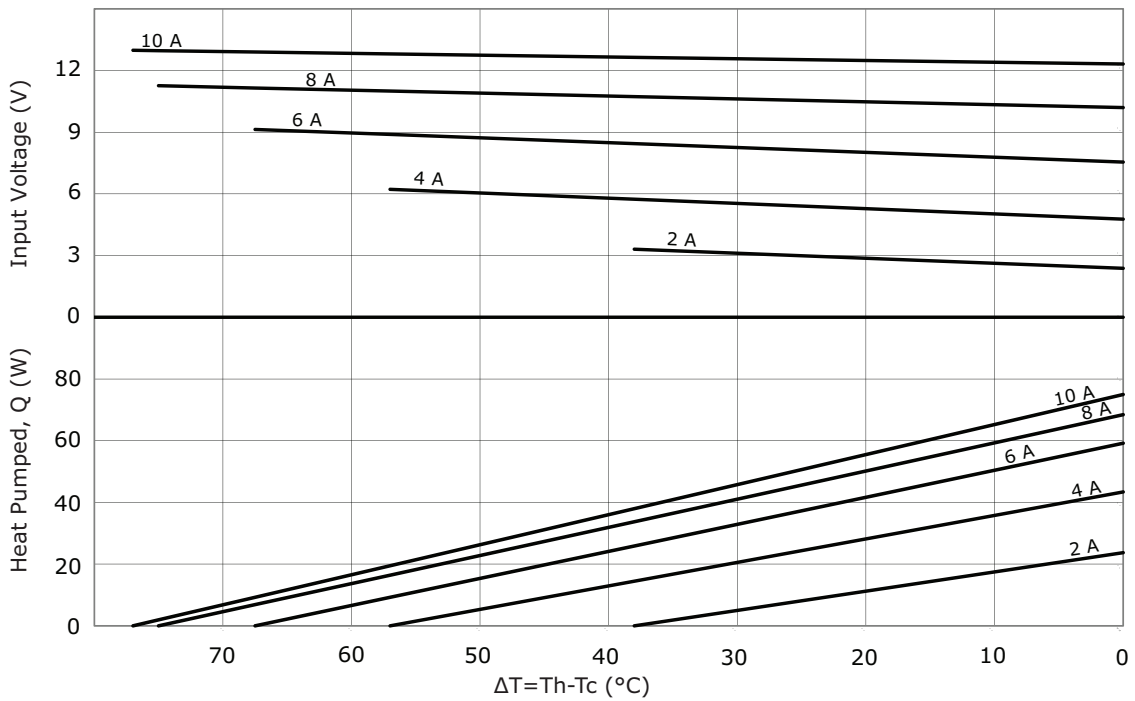


MODEL NO.	HOT SIDE LENGTH (mm)	COLD SIDE LENGTH (mm)	WIDTH (mm)	THICKNESS (mm)
CP103033	30 ±0.3	30 ±0.3	30 ±0.3	3.3 ±0.1
CP10415273	57 ±0.3	52 ±0.3	41 ±0.3	7.3 ±0.1
CP105559415	59 ±0.3	55 ±0.3	55 ±0.3	4.15 ±0.1

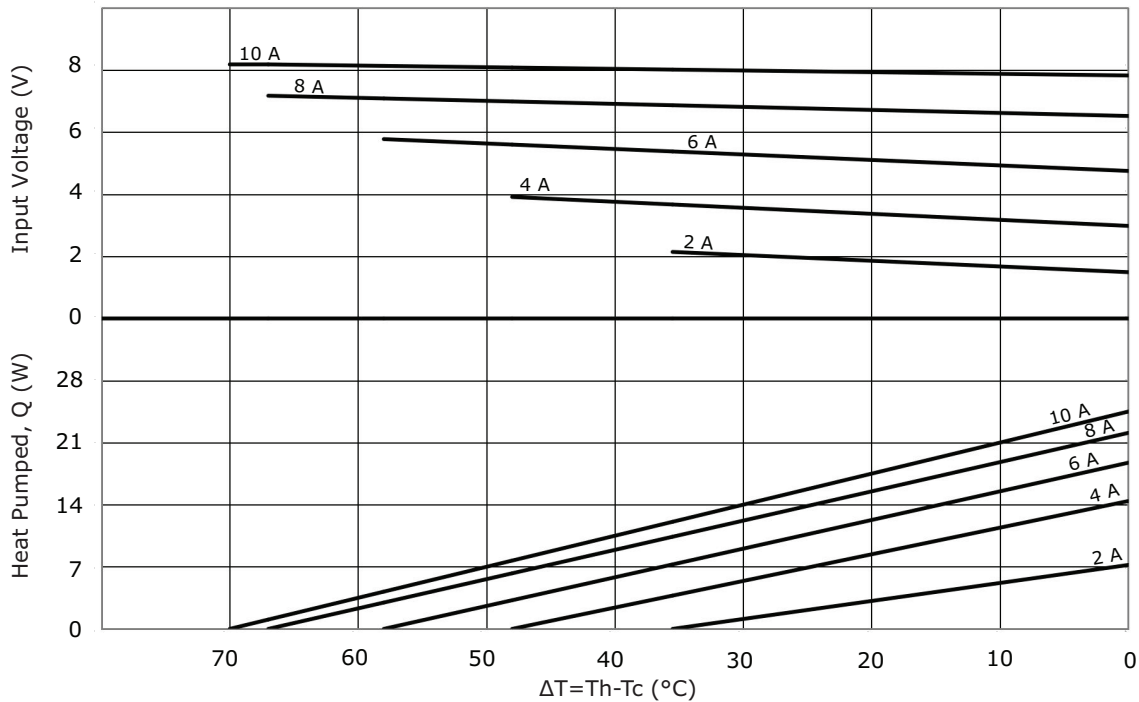
### CP103033 PERFORMANCE (Th=27°C)



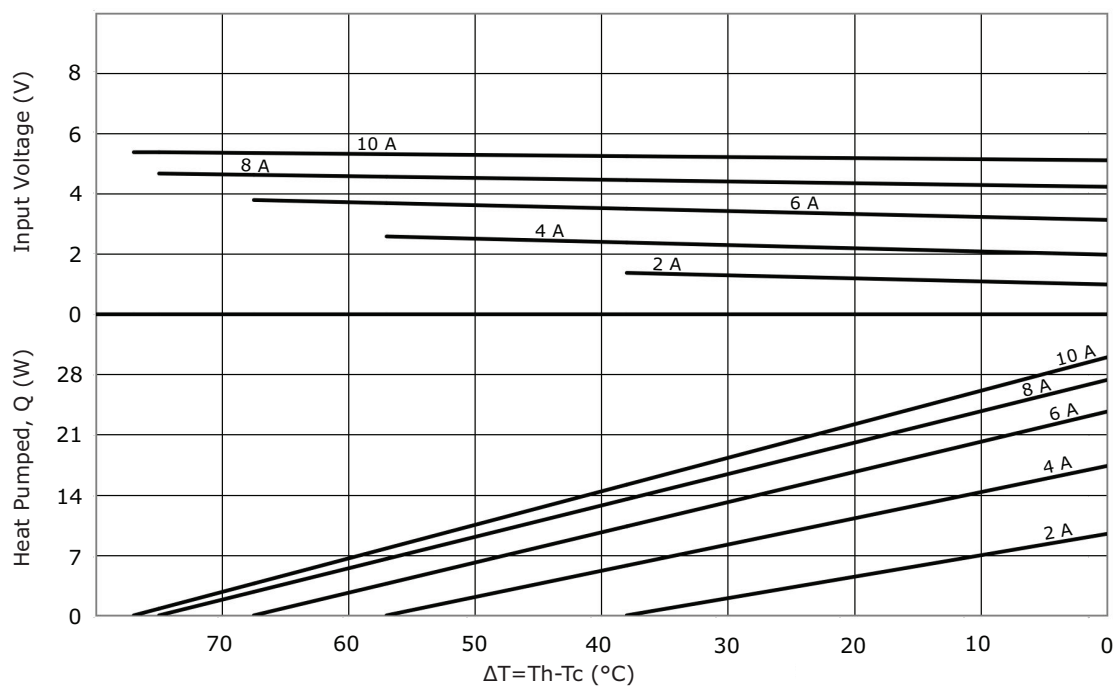
### CP103033 PERFORMANCE (Th=50°C)



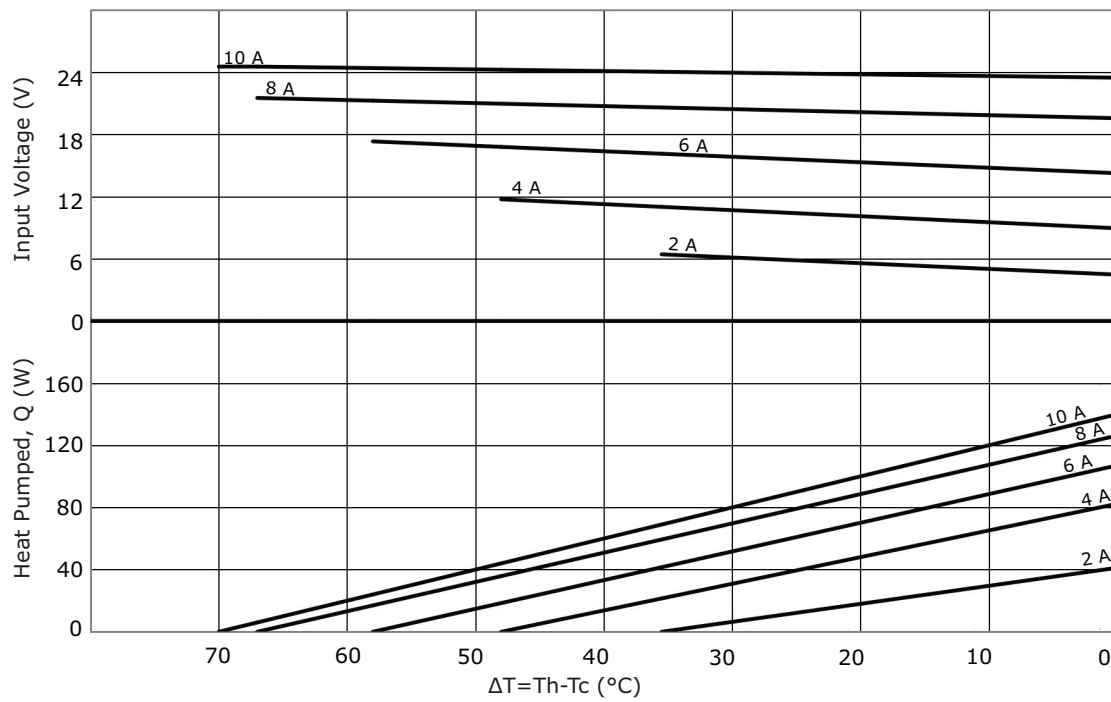
### CP10415273 PERFORMANCE (Th=27°C)



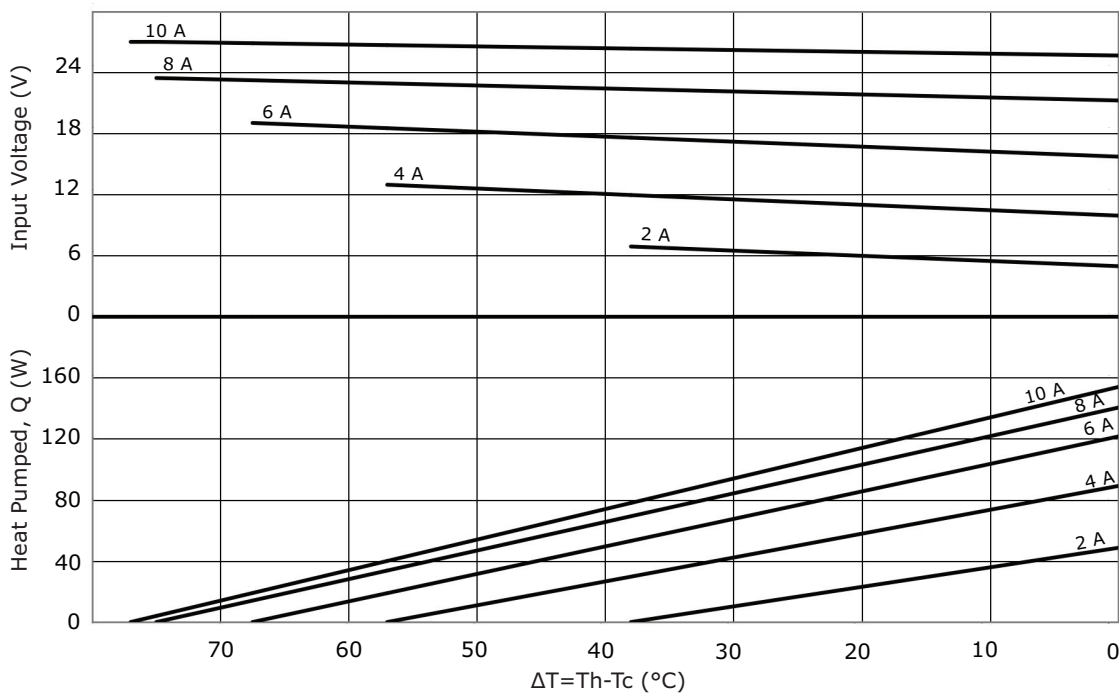
### CP10415273 PERFORMANCE (Th=50°C)



### CP105559415 PERFORMANCE (Th=27°C)



### CP105559415 PERFORMANCE (Th=50°C)



## REVISION HISTORY

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rev.	description	date
1.0	initial release	11/05/2019

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

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