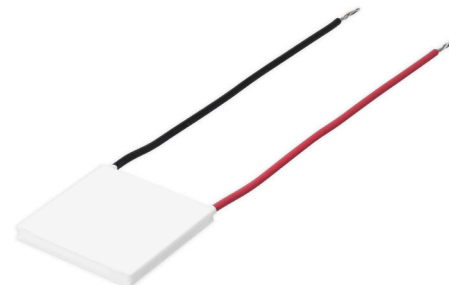


**SERIES:** CP100 | **DESCRIPTION:** PELTIER MODULE

**FEATURES**

- arcTEC™ structure on select models
- 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]
CP10205033	9.6	10	0.71	56.2	62	68	75
CP103033 <sup>6</sup>	11.8	10	0.88	69	75	70	77
CP10304033 <sup>6</sup>	15	10	1.13	89	97	70	77
CP10415273 <sup>6</sup>	4.9	10	0.37	28	30	70	77
CP105559415 <sup>6</sup>	24.6	10	1.82	140	154	70	77

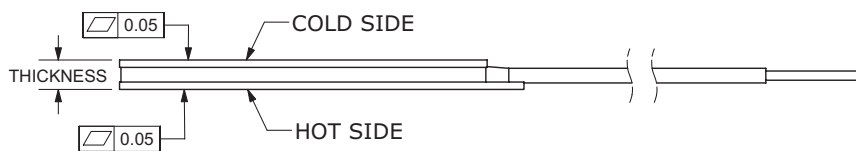
Notes: 1. Maximum voltage at  $\Delta T_{max}$  and T<sub>h</sub>=27°C  
 2. Maximum current to achieve  $\Delta T_{max}$   
 3. Measured by AC 4-terminal method at 25°C  
 4. Maximum heat absorbed at cold side occurs at I<sub>max</sub>, V<sub>max</sub>, and  $\Delta T=0^\circ\text{C}$   
 5. Maximum 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)  
 6. Designed with arcTEC™ structure.

## SPECIFICATIONS

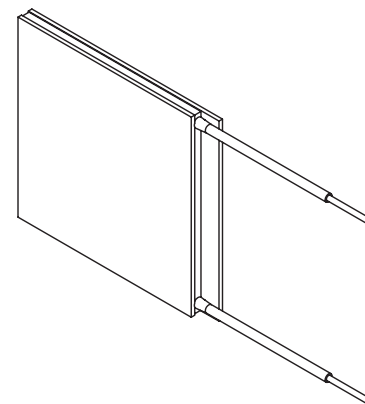
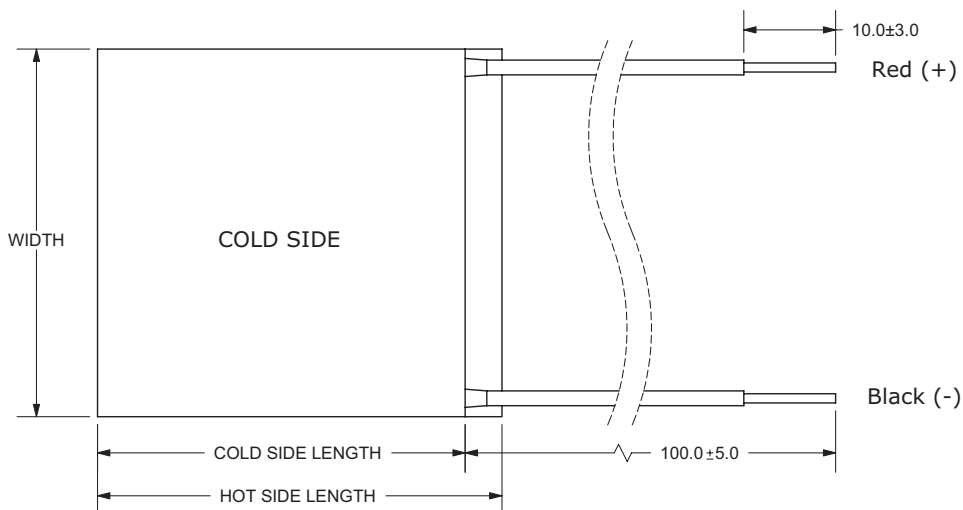
parameter	conditions/description	min	typ	max	units
solder melting temperature	connection between thermoelectric pairs	235			°C
assembly compression				1	MPa
RoHS	yes				

## MECHANICAL DRAWING

units: mm

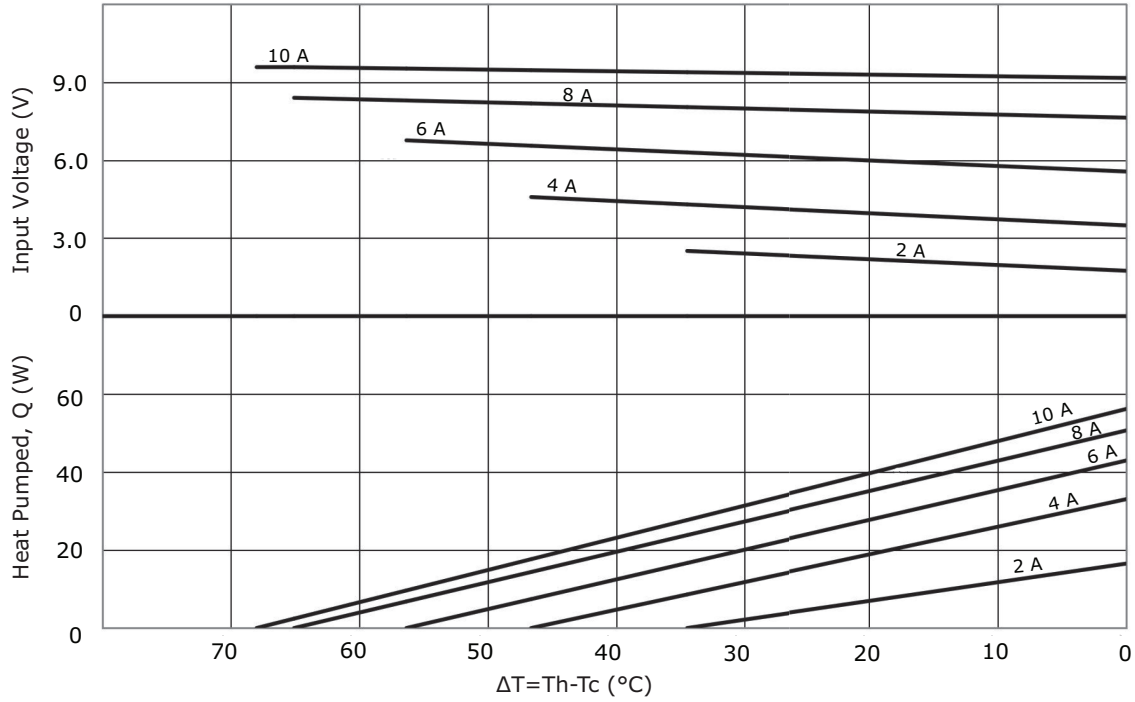


	MATERIAL	PLATING
ceramic plate	96% AL <sub>2</sub> O <sub>3</sub>	
wire leads [CP10415273]	18 AWG	tin
wire leads [all other models]	20 AWG	tin
sealer	silicon rubber 703 RTV (between cold and hot side plates)	
joint cover	silicon rubber 703 RTV	
marking	P/N & S/N printed on cold side surface	

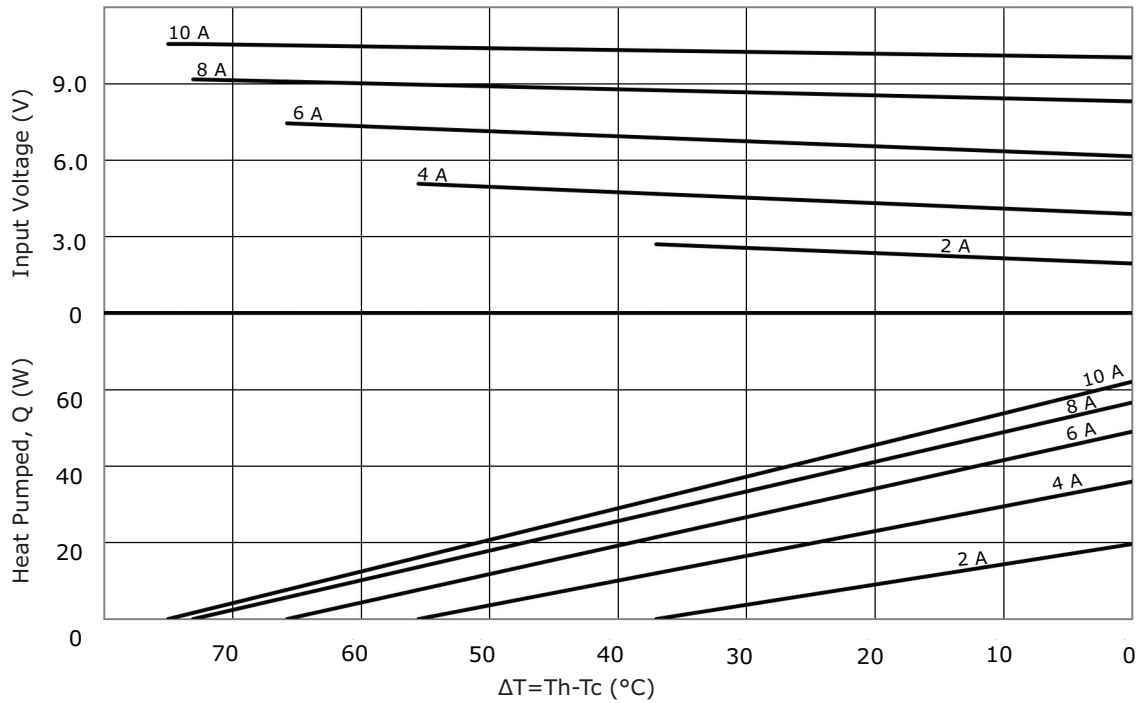


MODEL NO.	HOT SIDE LENGTH [mm]	COLD SIDE LENGTH [mm]	WIDTH [mm]	THICKNESS [mm]
CP10205033	20 ±0.3	20 ±0.3	50 ±0.3	3.3 ±0.1
CP103033	30 ±0.3	30 ±0.3	30 ±0.3	3.3 ±0.1
CP10304033	30 ±0.3	30 ±0.3	40 ±0.3	3.3 ±0.1
CP10415273	57 ±0.3	52 ±0.3	41 ±0.3	7.3 ±0.1
CP105559415	59 ±0.3	55 ±0.3	55 ±0.3	4.15 ±0.1

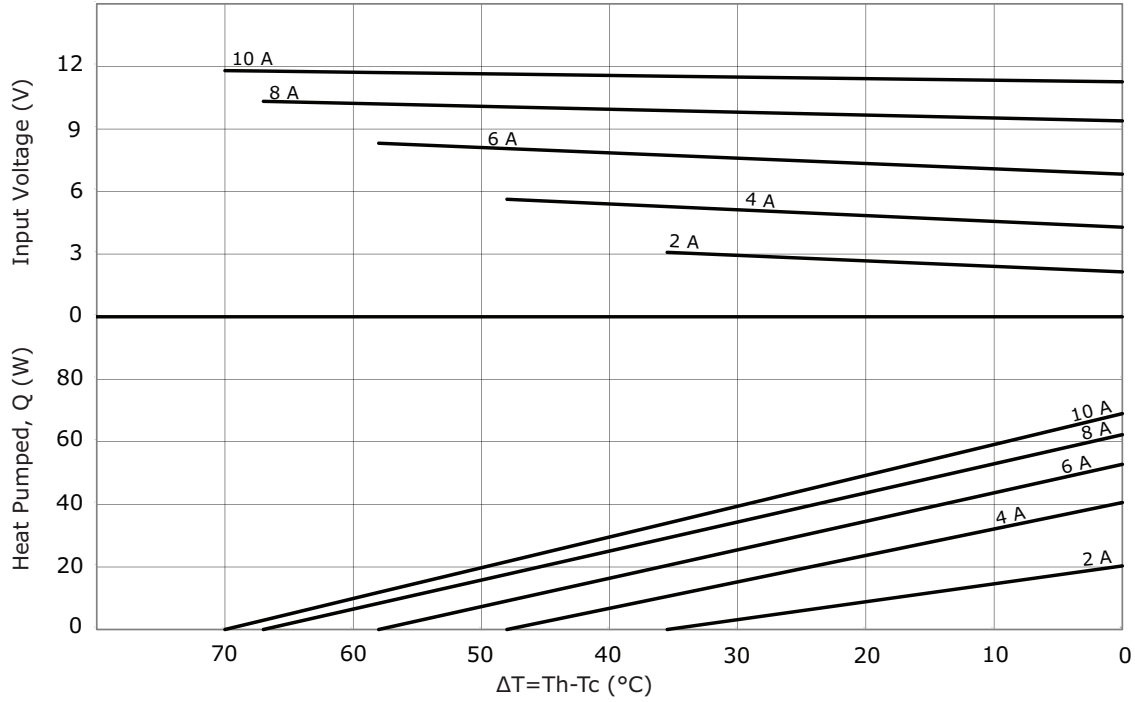
## CP10205033 PERFORMANCE (Th=27°C)



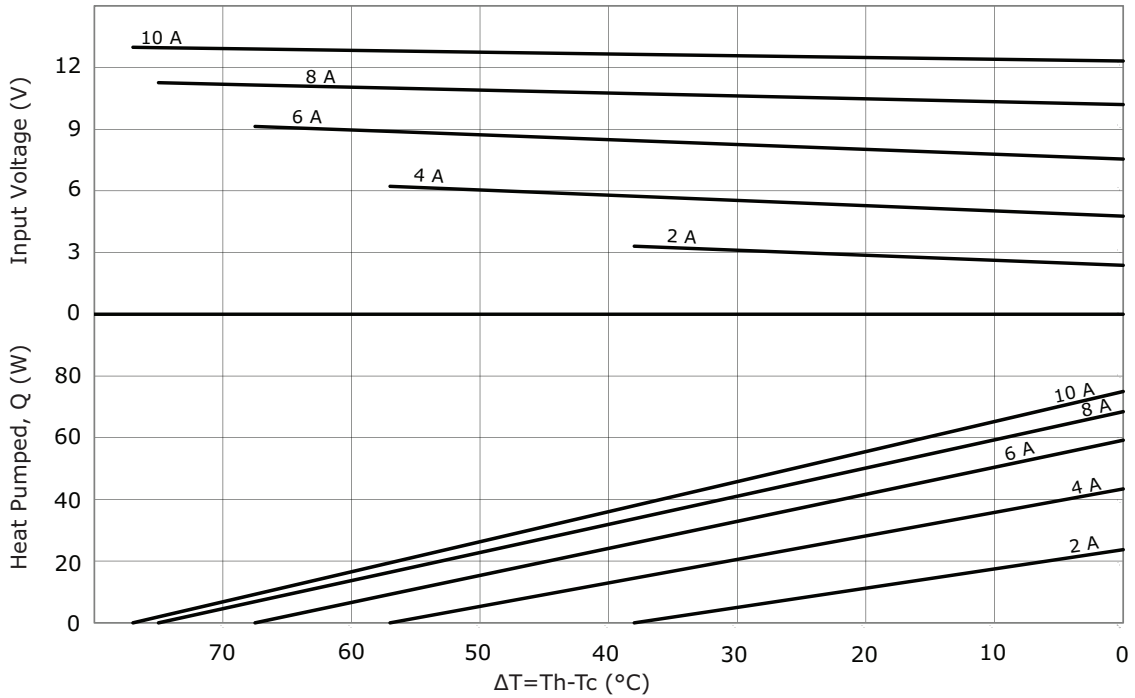
## CP10205033 PERFORMANCE (Th=50°C)



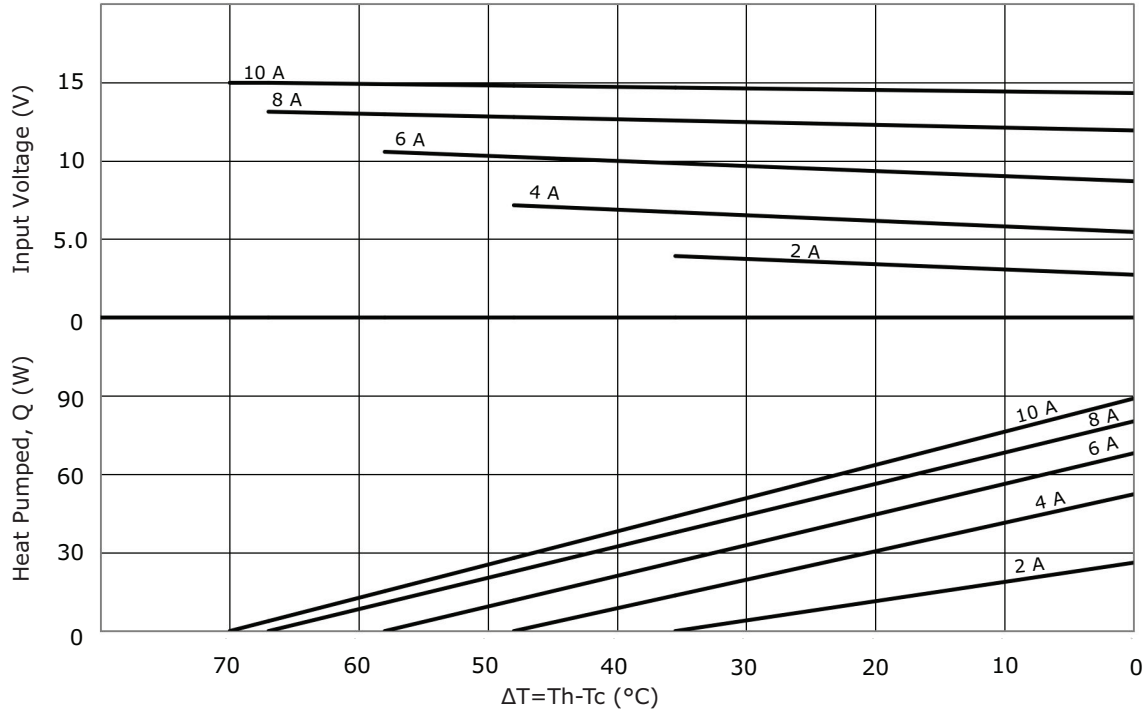
## CP103033 PERFORMANCE (Th=27°C)



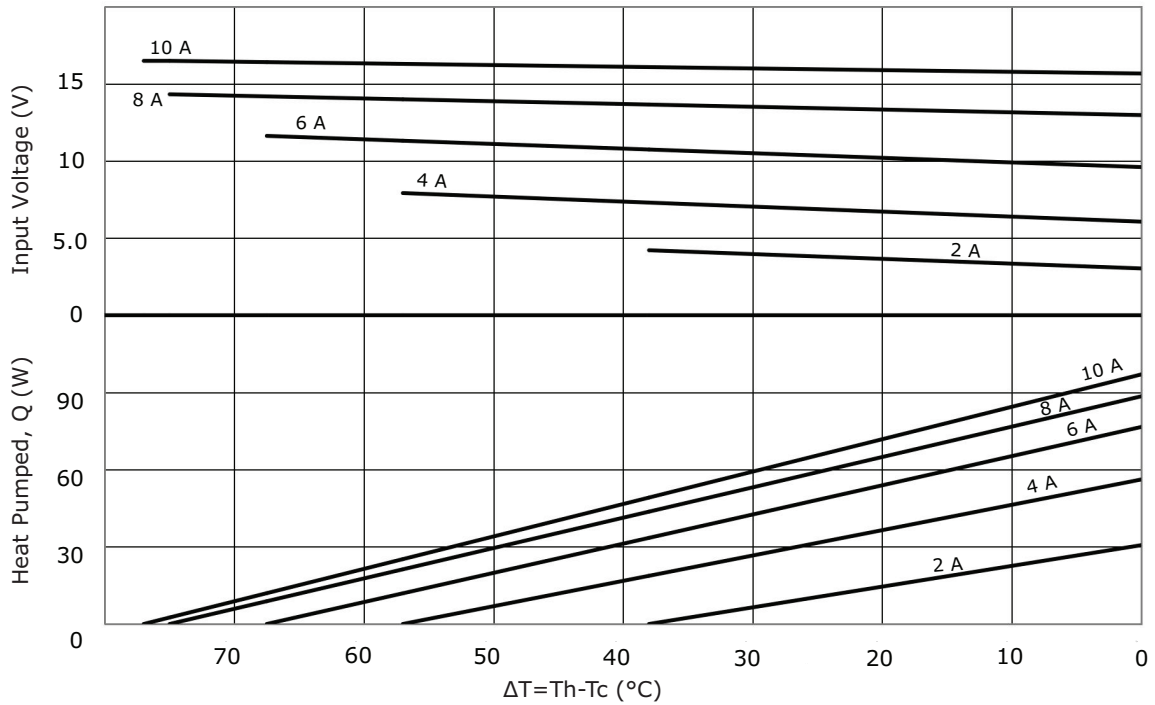
## CP103033 PERFORMANCE (Th=50°C)



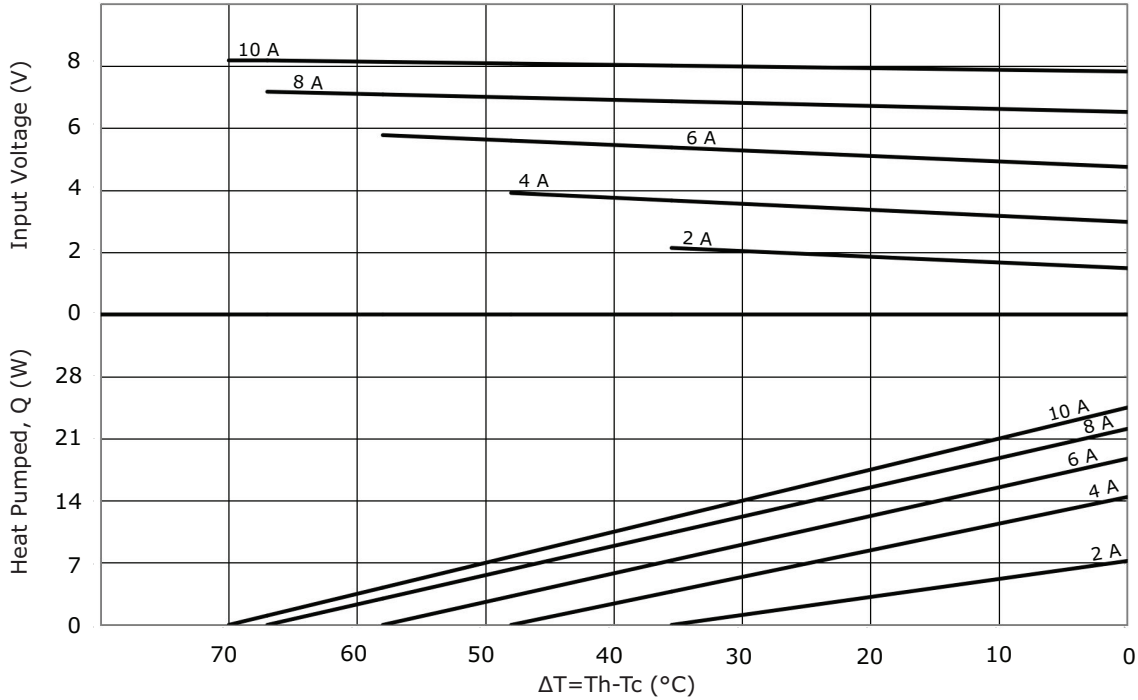
## CP10304033 PERFORMANCE (Th=27°C)



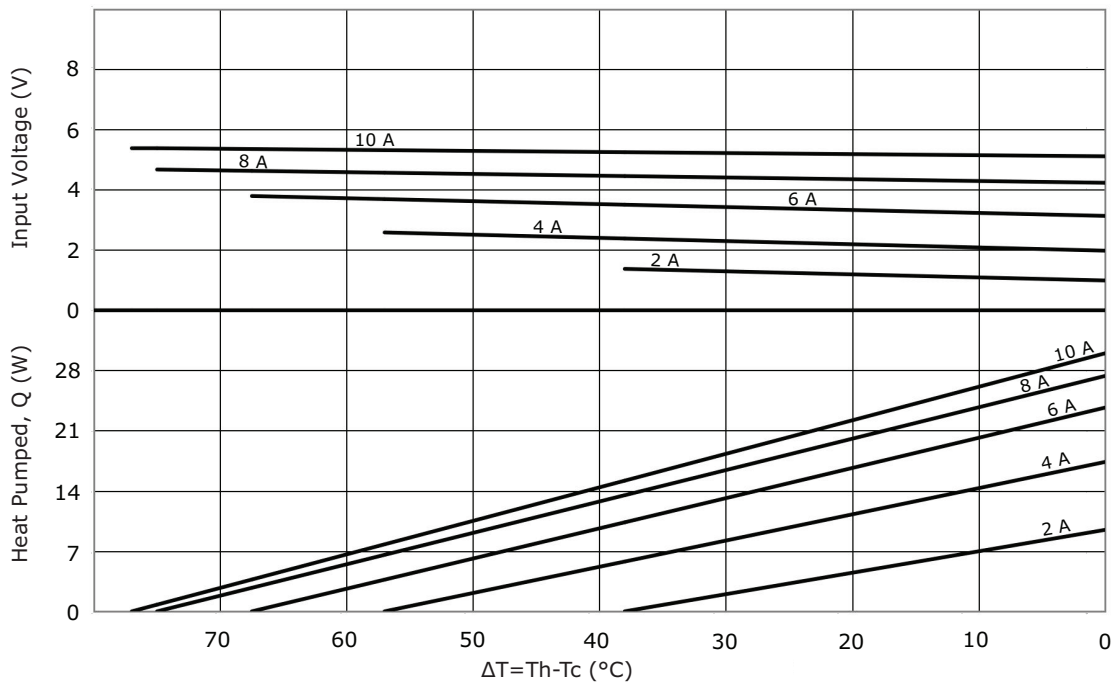
## CP10304033 PERFORMANCE (Th=50°C)



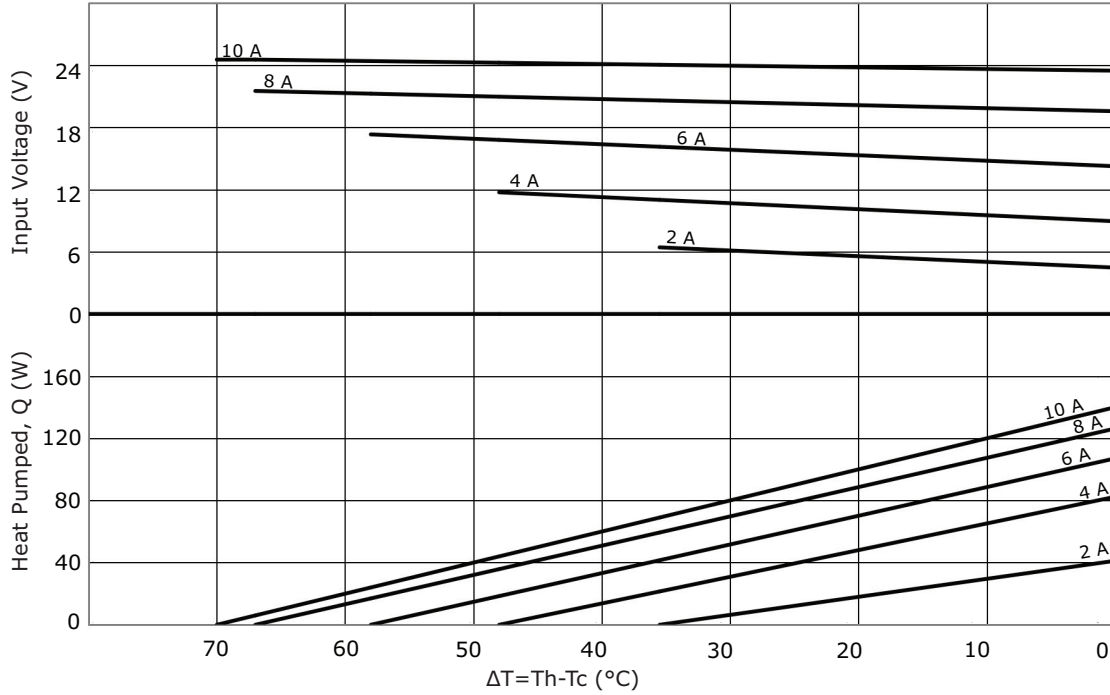
### CP10415273 PERFORMANCE (Th=27°C)



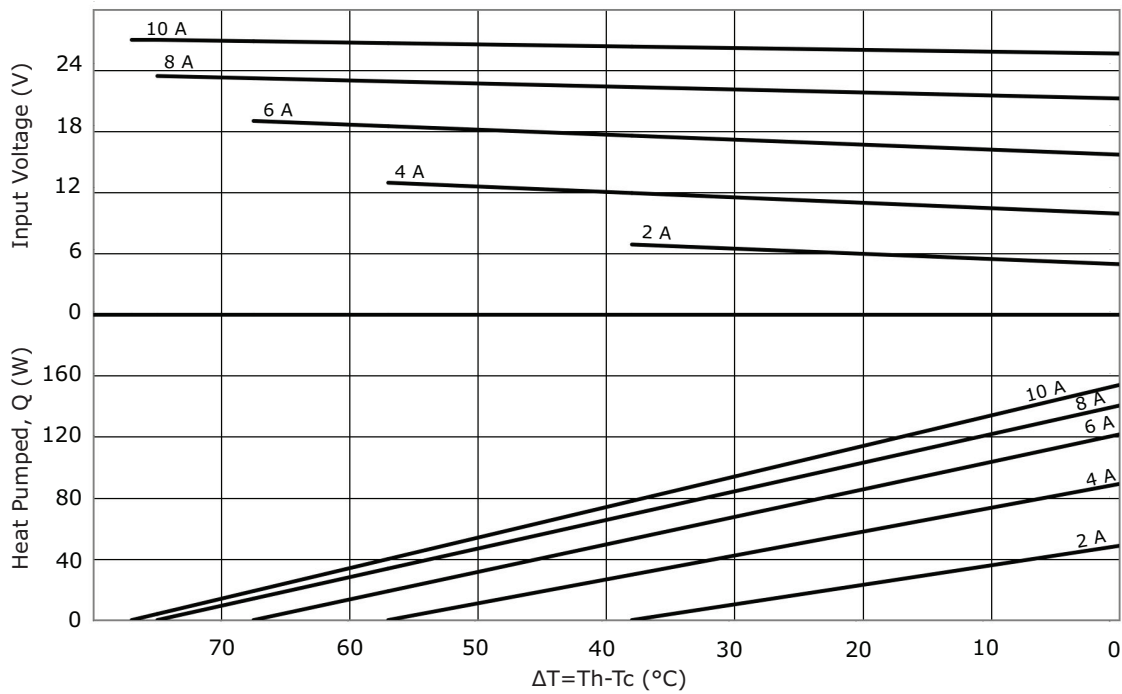
### CP10415273 PERFORMANCE (Th=50°C)



## CP10559415 PERFORMANCE (Th=27°C)



## CP10559415 PERFORMANCE (Th=50°C)



## REVISION HISTORY

rev.	description	date
1.0	initial release	11/05/2019
1.01	added models CP10205033 & CP10304033	11/09/2020
1.02	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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