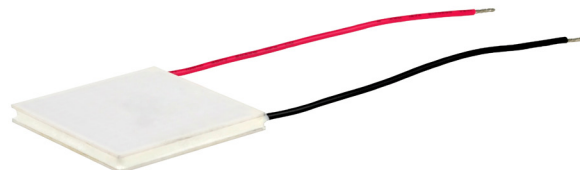




**SERIES:** CP85 | **DESCRIPTION:** PELTIER MODULE

**FEATURES**

- solid state device
- precise temperature control
- quiet operation



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)
CP85204035	7.6	8.5	0.75	37.4	41.8	68	75
CP85301535	4.2	8.5	0.41	20.0	22.3	68	75
CP85435	24.1	8.5	2.28	118	130	68	75
CP85138	2.1	8.5	0.20	10.0	11.1	68	75
CP85238	3.8	8.5	0.40	18.0	20.1	68	75
CP85338	8.6	8.5	0.90	42.0	46.9	68	75
CP85438	15.4	8.5	1.50	75.0	83.9	68	75

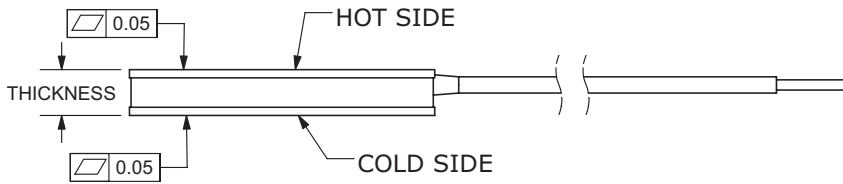
- Notes:
1. Maximum voltage at  $\Delta T_{max}$  and T<sub>h</sub>=27°C
  2. Maximum current to achieve  $\Delta T_{max}$
  3. Measured by AC 4-terminal method at 25°C
  4. Maximum heat absorbed at cold side occurs at I<sub>max</sub>, V<sub>max</sub>, and  $\Delta T=0^\circ\text{C}$
  5. Maximum temperature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

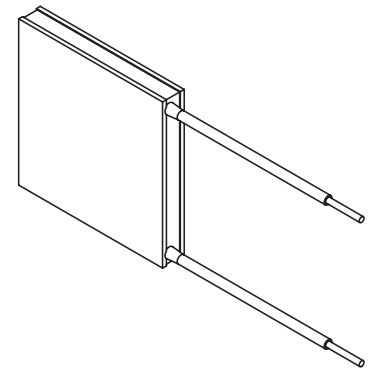
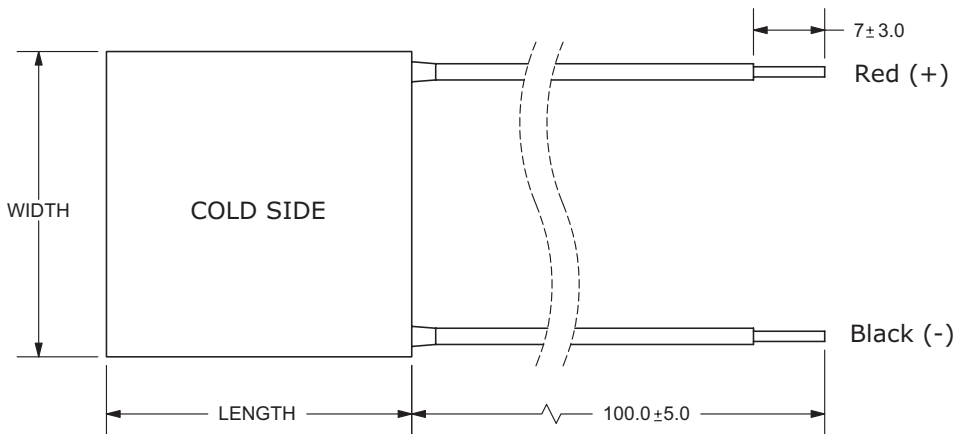
parameter	conditions/description	min	typ	max	units
solder melting temperature	connection between thermoelectric pairs	235			°C
assembly compression				1	MPa
hot side plate				80	°C
RoHS	yes				

## MECHANICAL DRAWING

units: mm

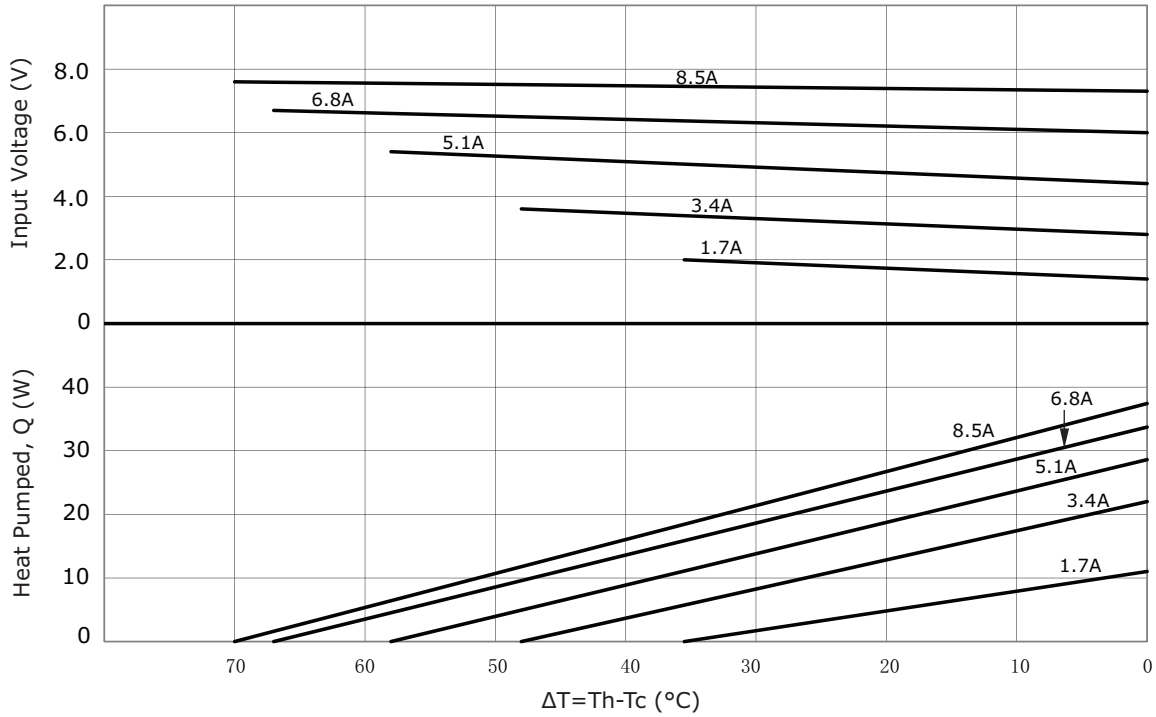


	MATERIAL	PLATING
ceramic plate	96% AL <sub>2</sub> O <sub>3</sub>	
wire leads	20 AWG	tin
sealer	silicon rubber 703 RTV (between cold and hot side plates)	
joint cover	silicon rubber 703 RTV	
marking	P/N & S/N printed on cold side surface	

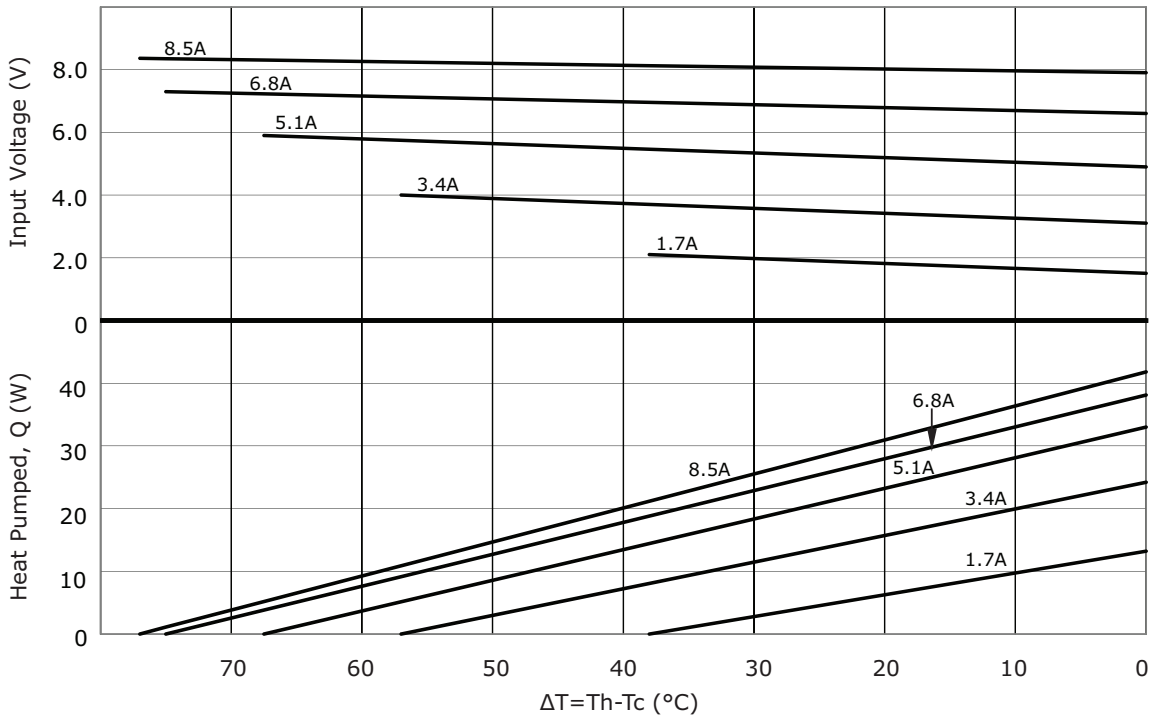


MODEL NO.	LENGTH (mm)	WIDTH (mm)	THICKNESS (mm)
CP85204035	20 ±0.3	40 ±0.3	3.5 ±0.1
CP85301535	30 ±0.3	15 ±0.3	3.5 ±0.1
CP85435	40 ±0.3	40 ±0.3	3.5 ±0.1
CP85138	15 ±0.3	15 ±0.3	3.74 ±0.1
CP85238	20 ±0.3	20 ±0.3	3.74 ±0.1
CP85338	30 ±0.3	30 ±0.3	3.74 ±0.1
CP85438	40 ±0.3	40 ±0.3	3.74 ±0.1

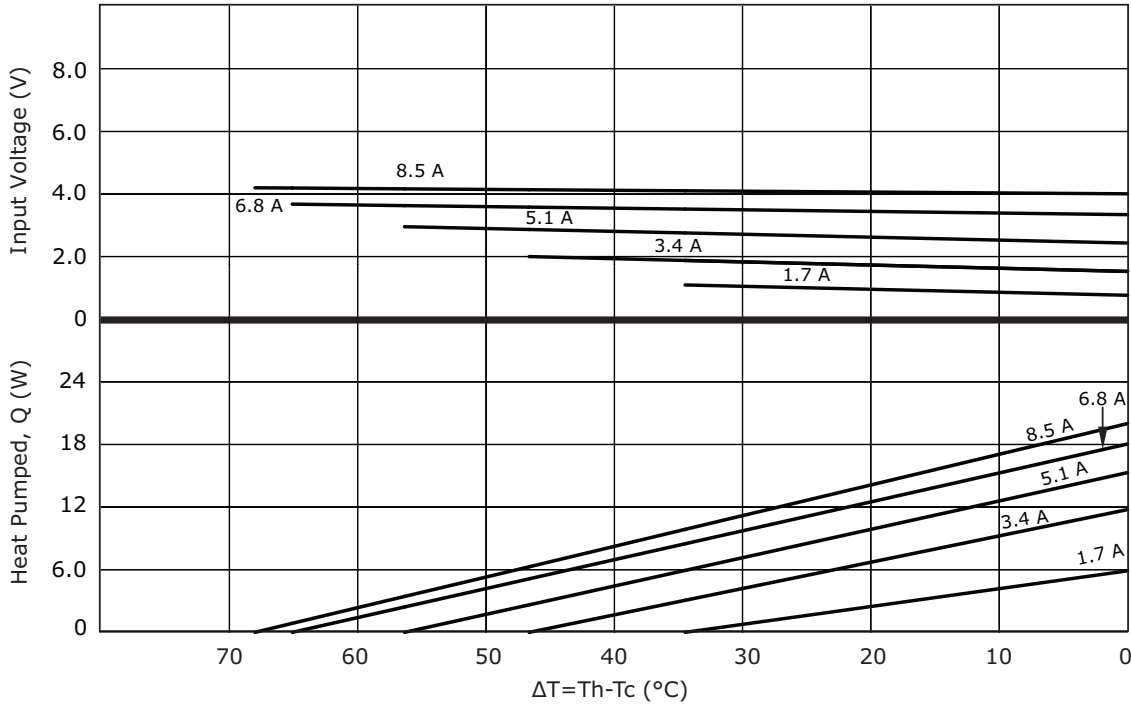
### CP85204035 PERFORMANCE (Th=27°C)



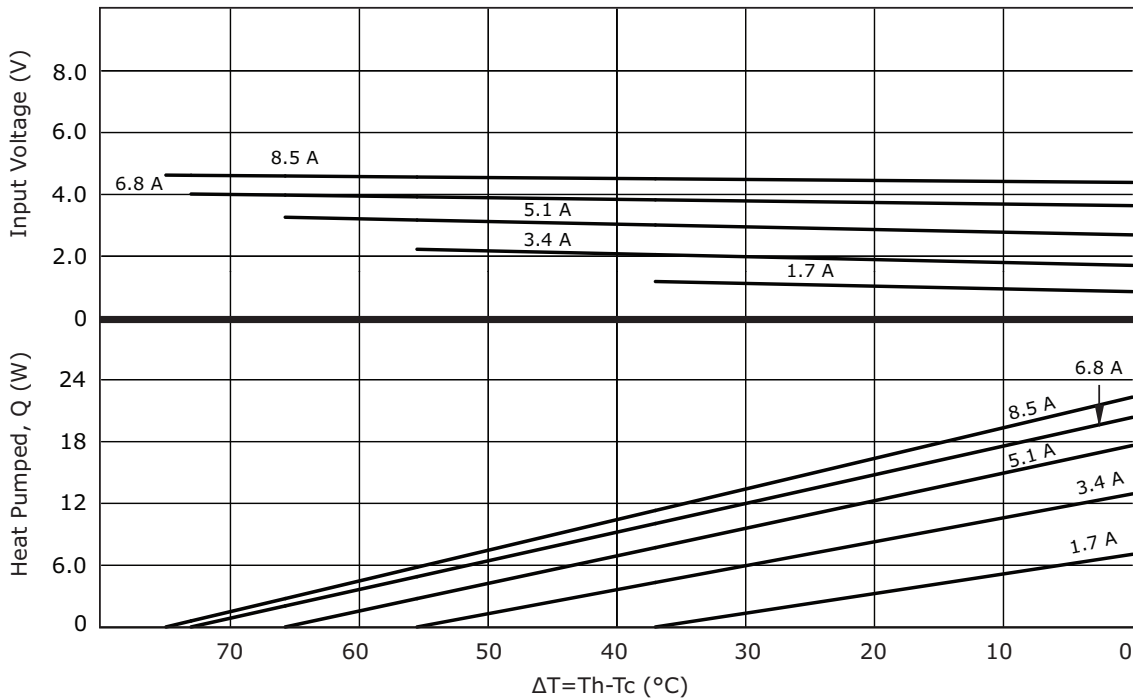
### CP85204035 PERFORMANCE (Th=50°C)



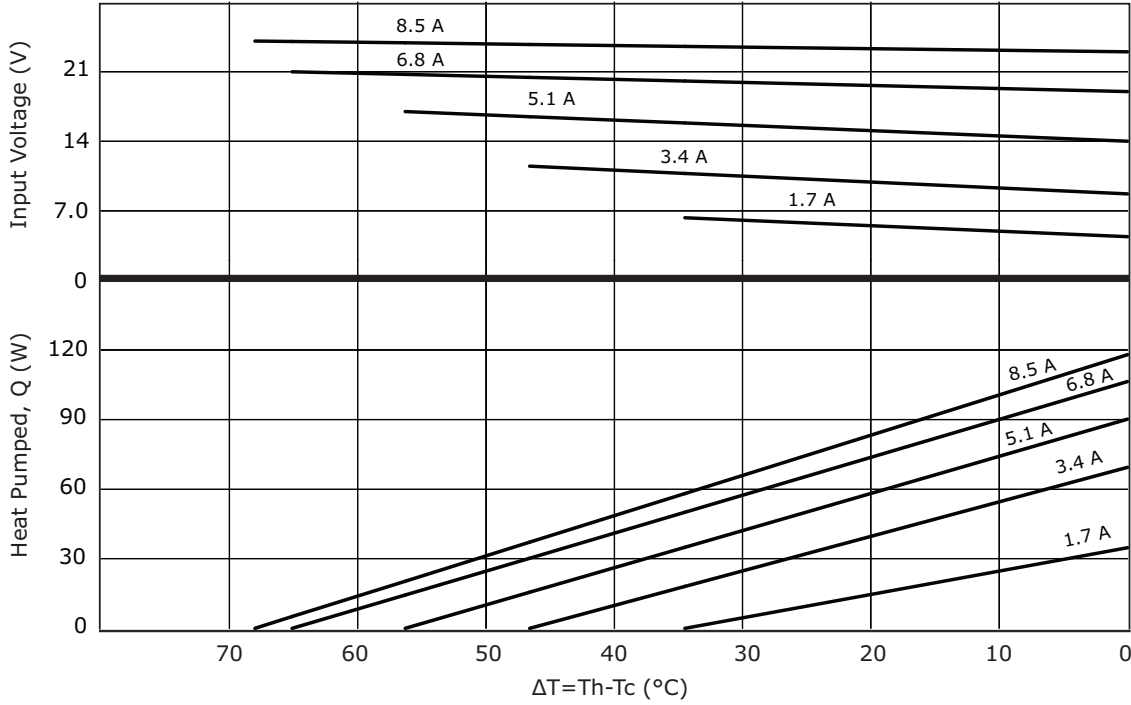
### CP85301535 PERFORMANCE (Th=27°C)



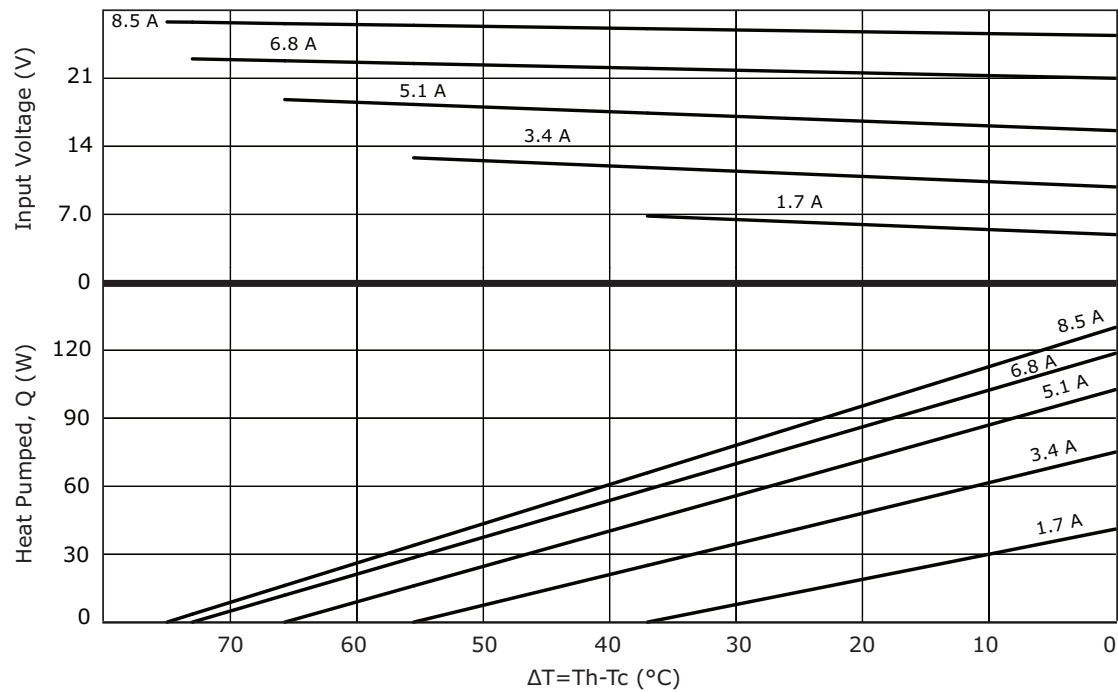
### CP85301535 PERFORMANCE (Th=50°C)



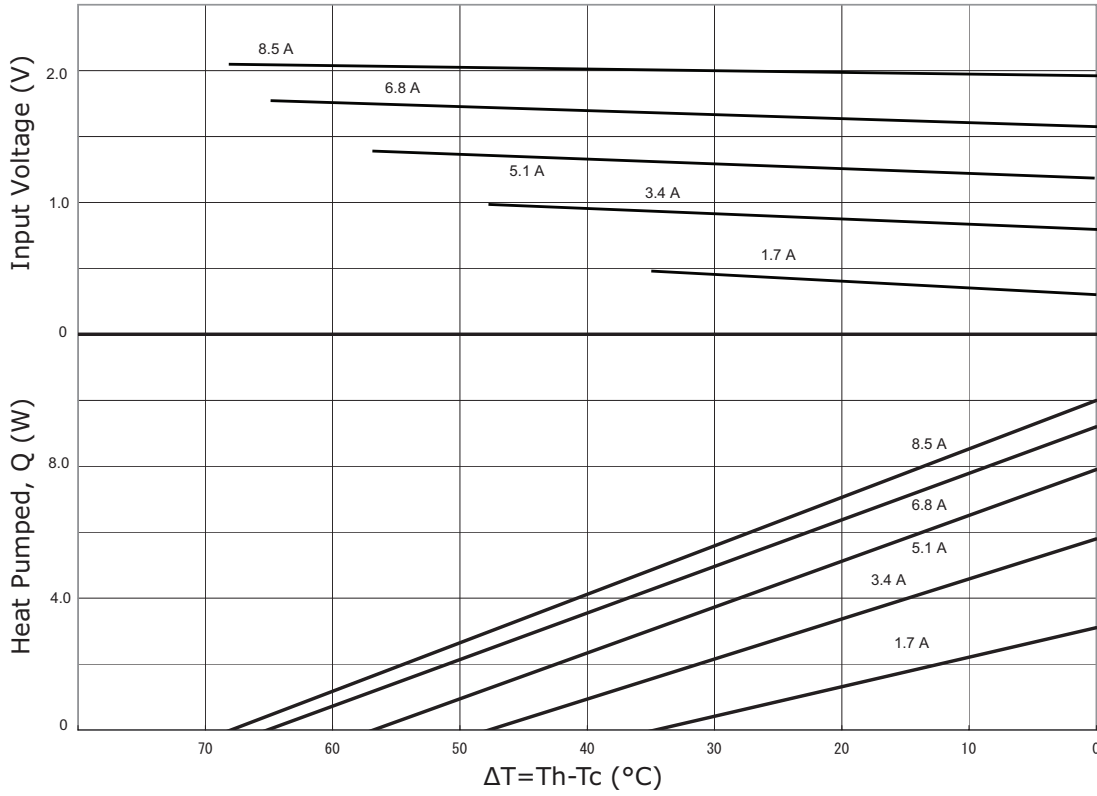
### CP85435 PERFORMANCE (Th=27°C)



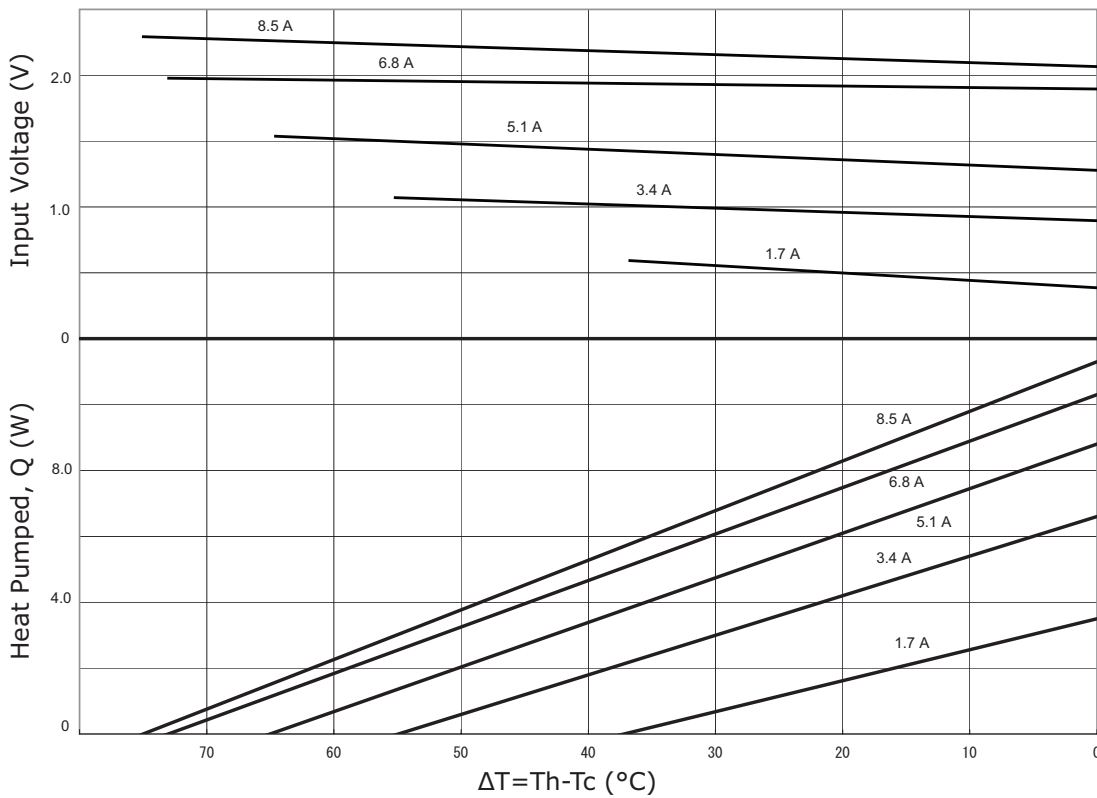
### CP85435 PERFORMANCE (Th=50°C)



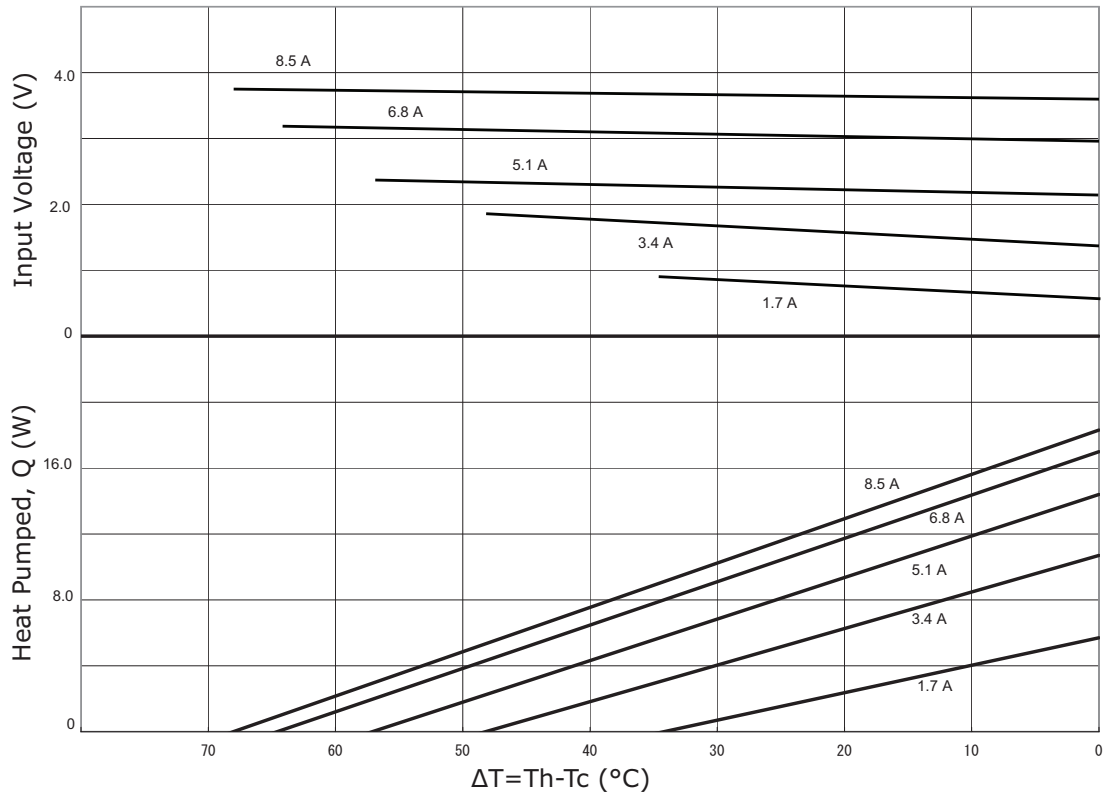
### CP85138 PERFORMANCE (Th=27°C)



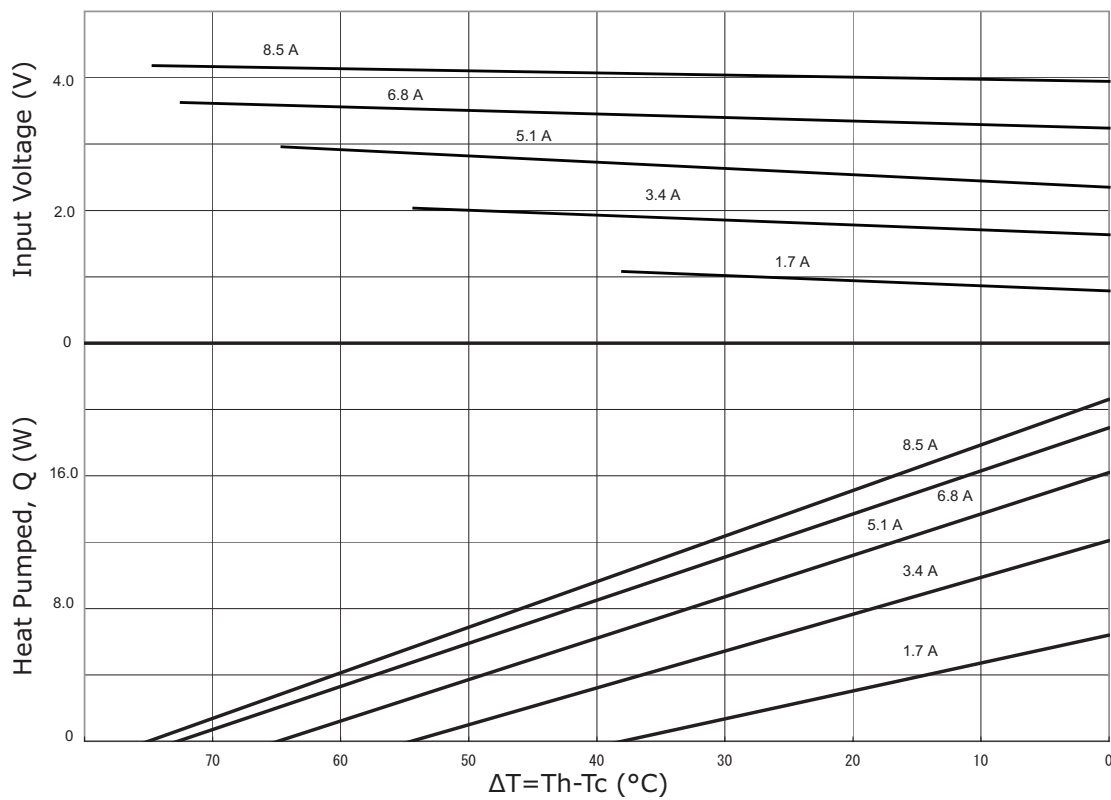
### CP85138 PERFORMANCE (Th=50°C)



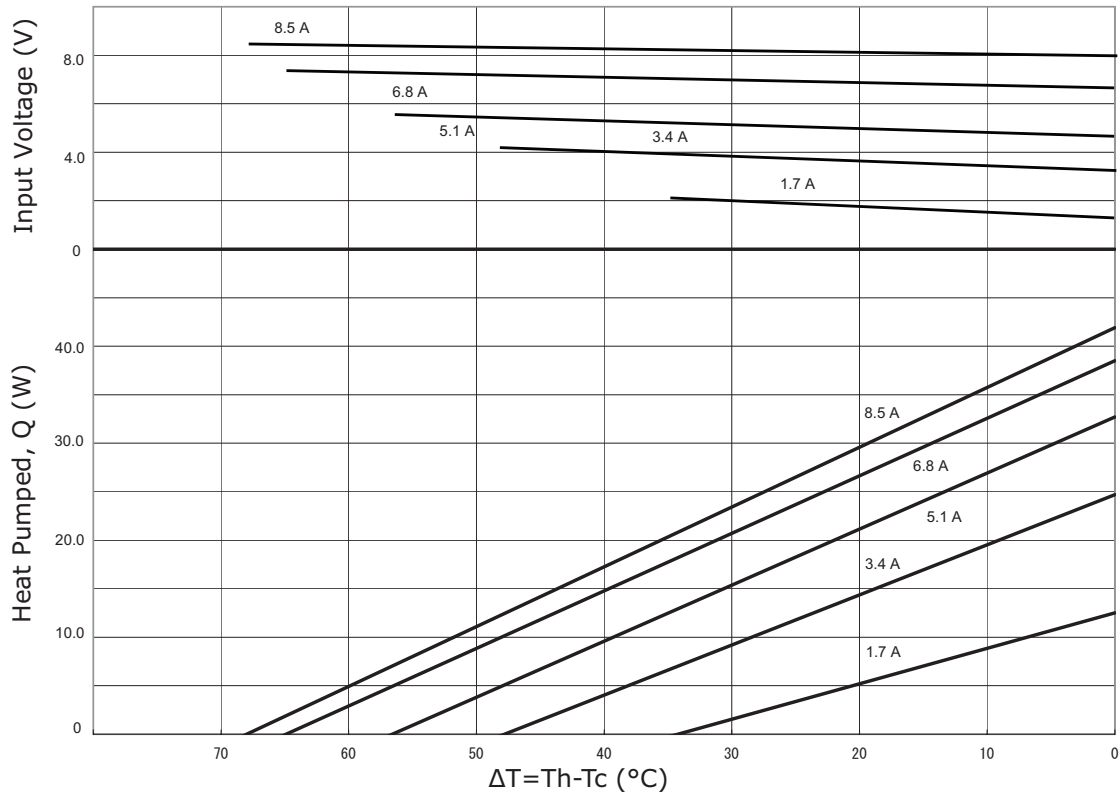
### CP85238 PERFORMANCE (Th=27°C)



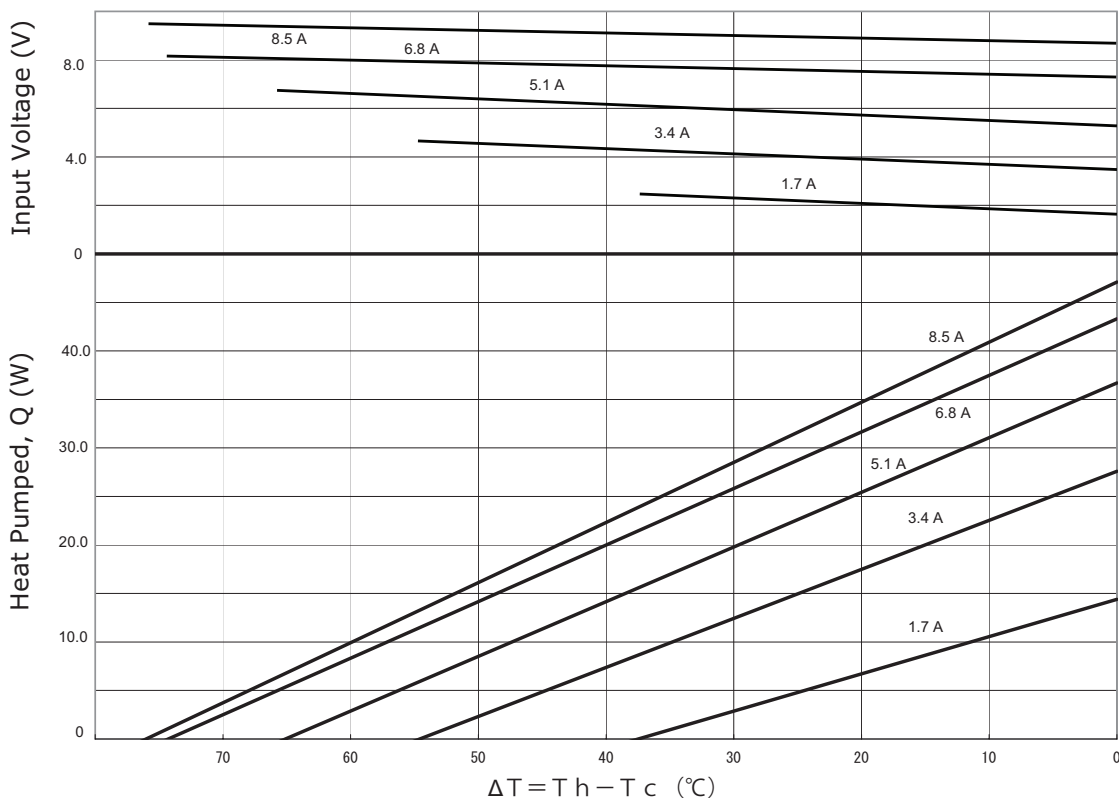
### CP85238 PERFORMANCE (Th=50°C)



### CP85338 PERFORMANCE (Th=27°C)

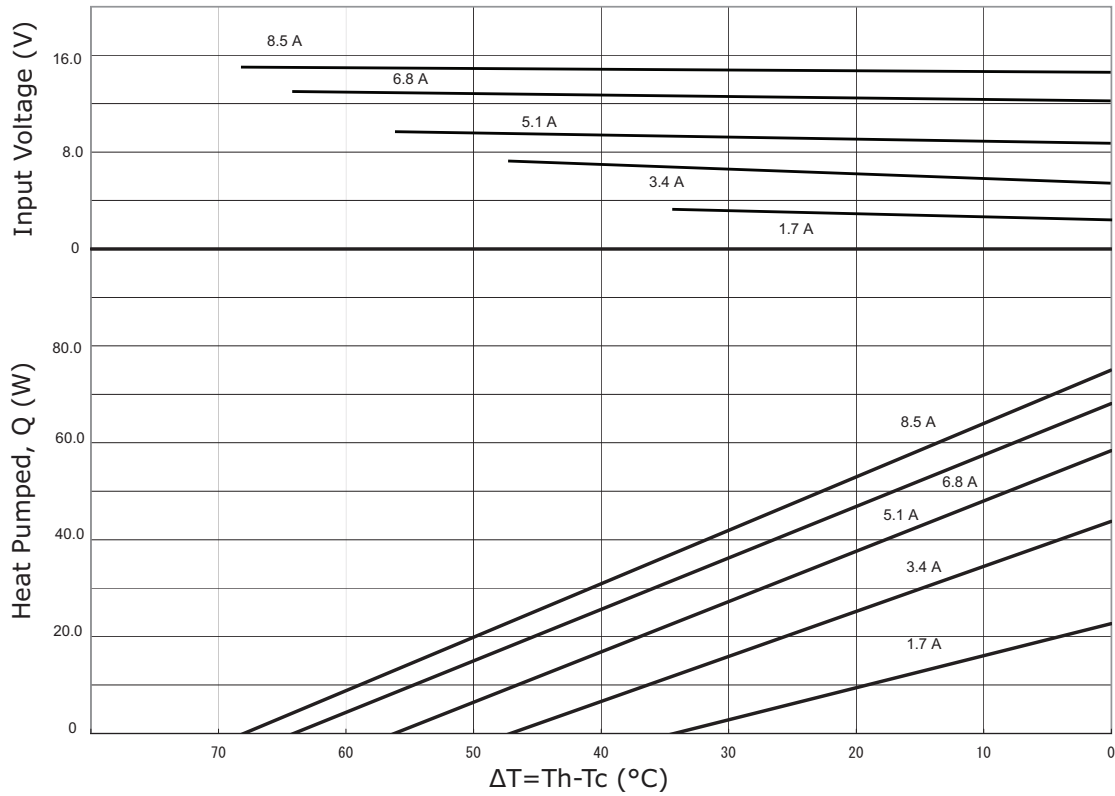


### CP85338 PERFORMANCE (Th=50°C)

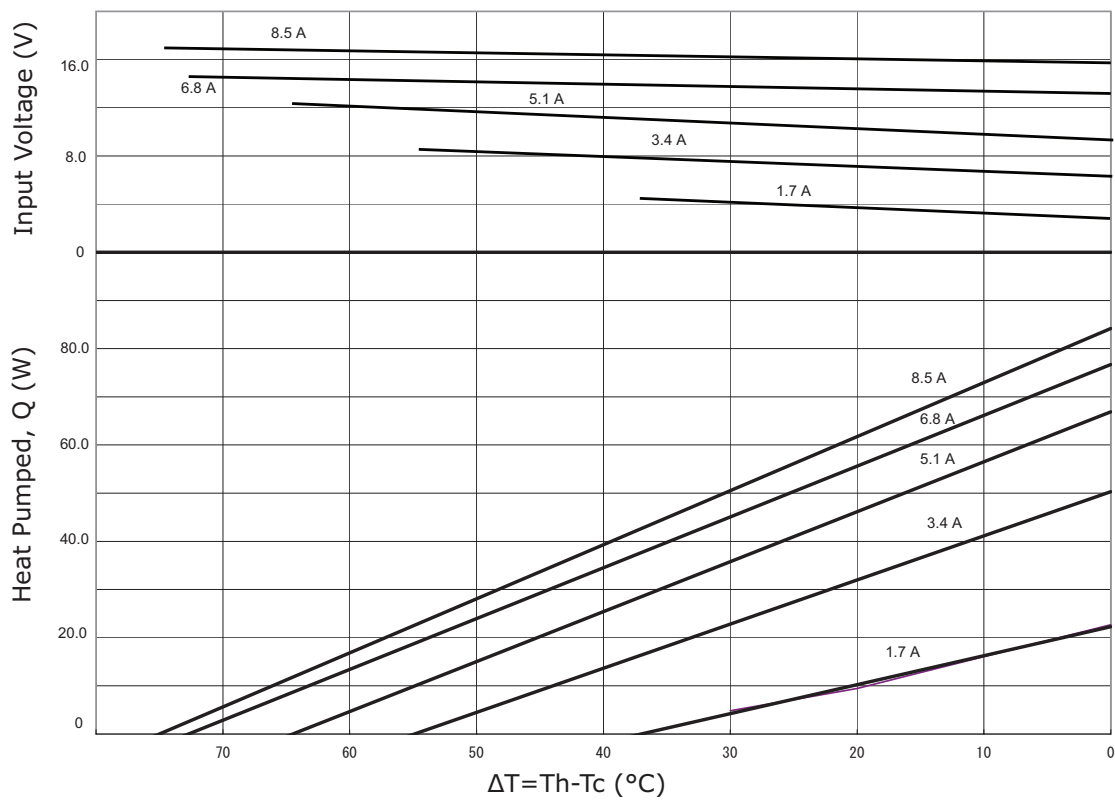




### CP85438 PERFORMANCE (Th=27°C)



### CP85438 PERFORMANCE (Th=50°C)



## REVISION HISTORY

rev.	description	date
1.0	initial release	09/03/2009
1.01	applied new template	05/08/2012
1.02	added new models	09/08/2016
1.03	changed to higher temperature solder used in model CP85204035	11/29/2017
1.04	changed thickness of CP85138, CP85238, CP85338, CP85438, CP85301535, CP85435 models	09/19/2018
1.05	changed thickness of model CP85204035	12/03/2018

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



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