

**SERIES:** CP35 | **DESCRIPTION:** PELTIER MODULE

**FEATURES**

- arcTEC™ structure on select models
- solid state device
- precise temperature control
- quiet operation


**MODEL**

	input voltage <sup>1</sup>	input current <sup>2</sup>	internal resistance <sup>3</sup>	output Qmax <sup>4</sup>		output ΔTmax <sup>5</sup>	
	max [Vdc]	max [A]	typ [Ω±10%]	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]
CP35147	2.1	3.5	0.44	3.9	4.3	68	75
CP35247	3.8	3.5	0.80	7.0	7.7	68	75
CP35301547	4.2	3.5	0.90	7.9	8.7	68	75
CP35347 <sup>6</sup>	8.6	3.5	1.93	16.0	17.8	70	77
CP353047 <sup>6</sup>	11.8	3.5	2.52	24.0	26.0	70	77
CP35447 <sup>6</sup>	15.4	3.5	3.3	29.0	32.0	70	77
CP354047 <sup>6</sup>	24.1	3.5	5.17	49.0	53.0	70	77

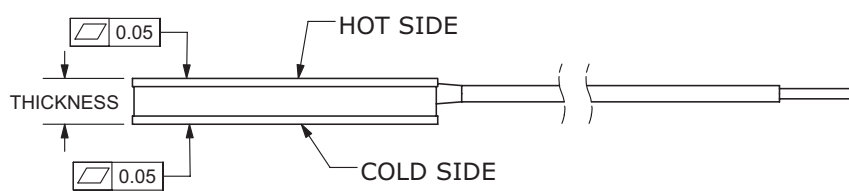
Notes: 1. Maximum voltage at ΔT max and T<sub>h</sub>=27°C  
 2. Maximum current to achieve ΔT max  
 3. Measured by AC 4-terminal method at 25°C  
 4. Maximum heat absorbed at cold side occurs at I<sub>max</sub>, V<sub>max</sub>, and ΔT=0°C  
 5. Maximum temperature difference occurs at I<sub>max</sub>, V<sub>max</sub>, and Q=0W (ΔT max measured in a vacuum at 1.3 Pa)  
 6. Designed with arcTEC™ structure.

## SPECIFICATIONS

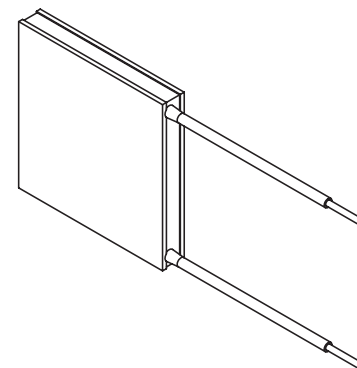
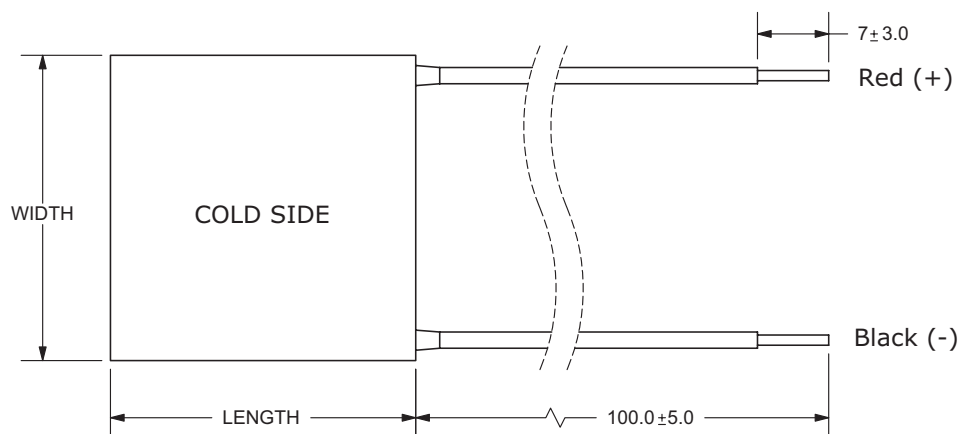
parameter	conditions/description	min	typ	max	units
solder melting temperature	connection between thermoelectric pairs	235			°C
	CP35347, CP353047, CP35447, CP354047 all other models	138			°C
assembly compression				1	MPa
RoHS	yes				

## MECHANICAL DRAWING

units: mm



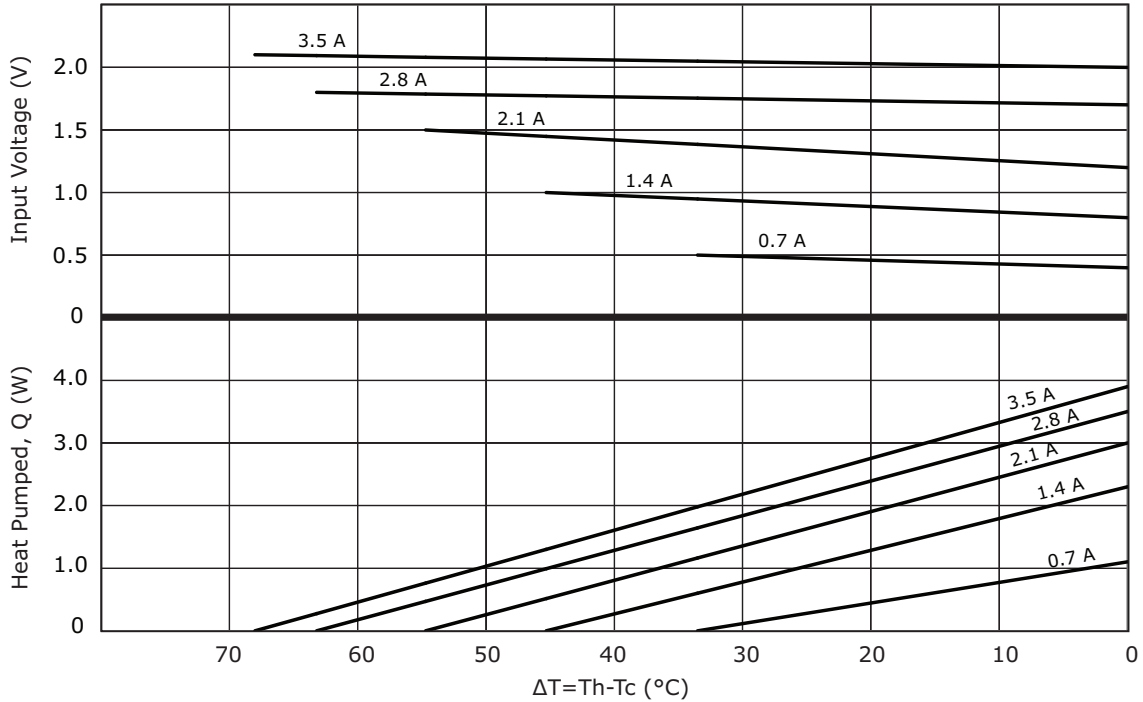
	MATERIAL	PLATING
ceramic plate	96% AL <sub>2</sub> O <sub>3</sub>	
wire leads	20 AWG	tin
sealer	silicon rubber 703 RTV (between cold and hot side plates)	
joint cover	silicon rubber 703 RTV	
marking	P/N & S/N printed on cold side surface	



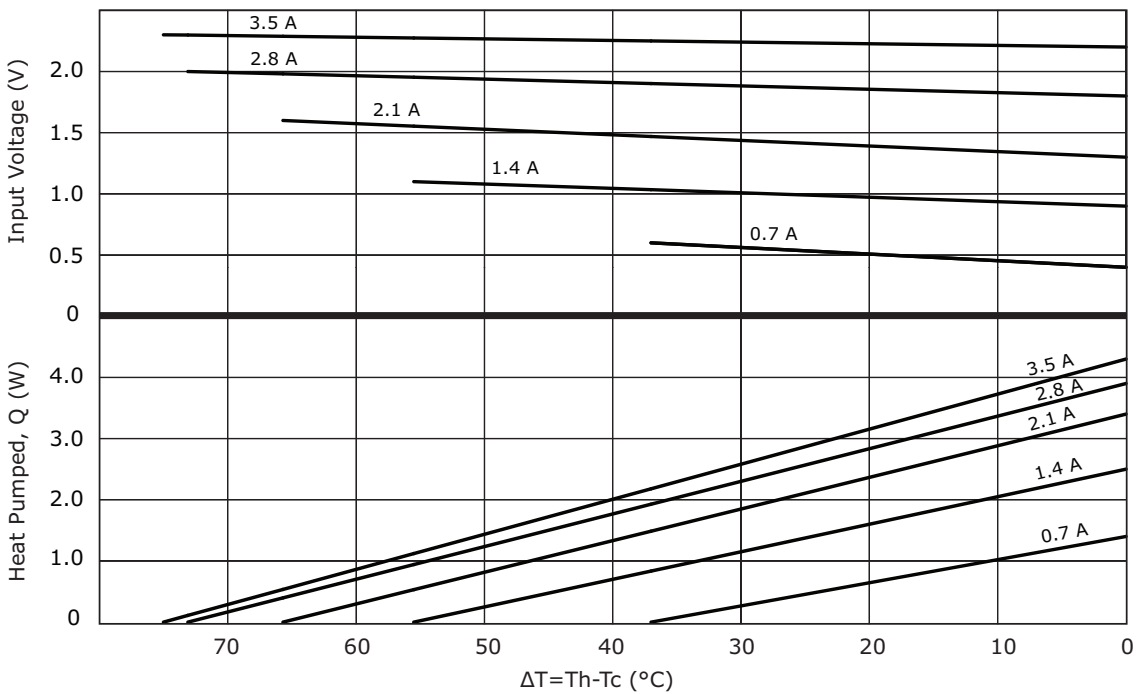
MODEL NO.	LENGTH (mm)	WIDTH (mm)	THICKNESS (mm)
CP35147	15 ± 0.3	15 ± 0.3	4.7 ± 0.1
CP35247	20 ± 0.3	20 ± 0.3	4.7 ± 0.1
CP35301547	30 ± 0.3	15 ± 0.3	4.7 ± 0.1
CP35347 <sup>1</sup>	30 ± 0.3	30 ± 0.3	4.7 ± 0.1
CP353047	30 ± 0.3	30 ± 0.3	4.7 ± 0.1
CP35447	40 ± 0.3	40 ± 0.3	4.65 ± 0.025
CP354047	40 ± 0.3	40 ± 0.3	4.7 ± 0.1

Notes: 1. Wire lead strip length on model CP35347 is 10 ± 3.0 mm.

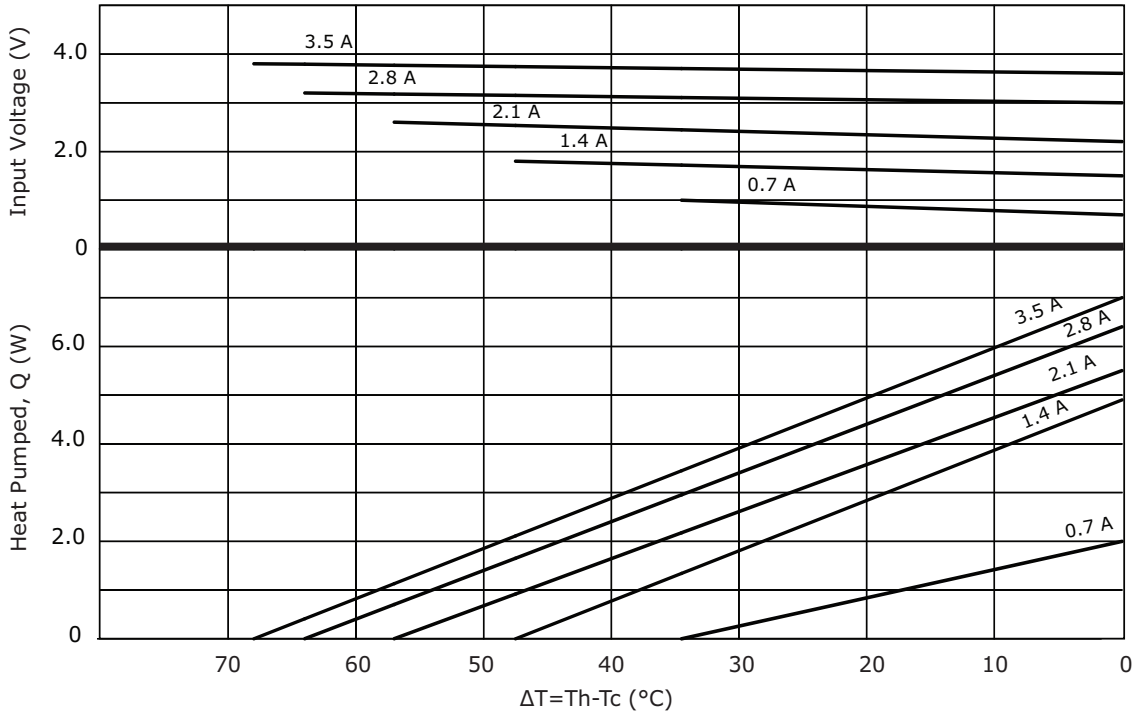
### CP35147 PERFORMANCE (Th=27°C)



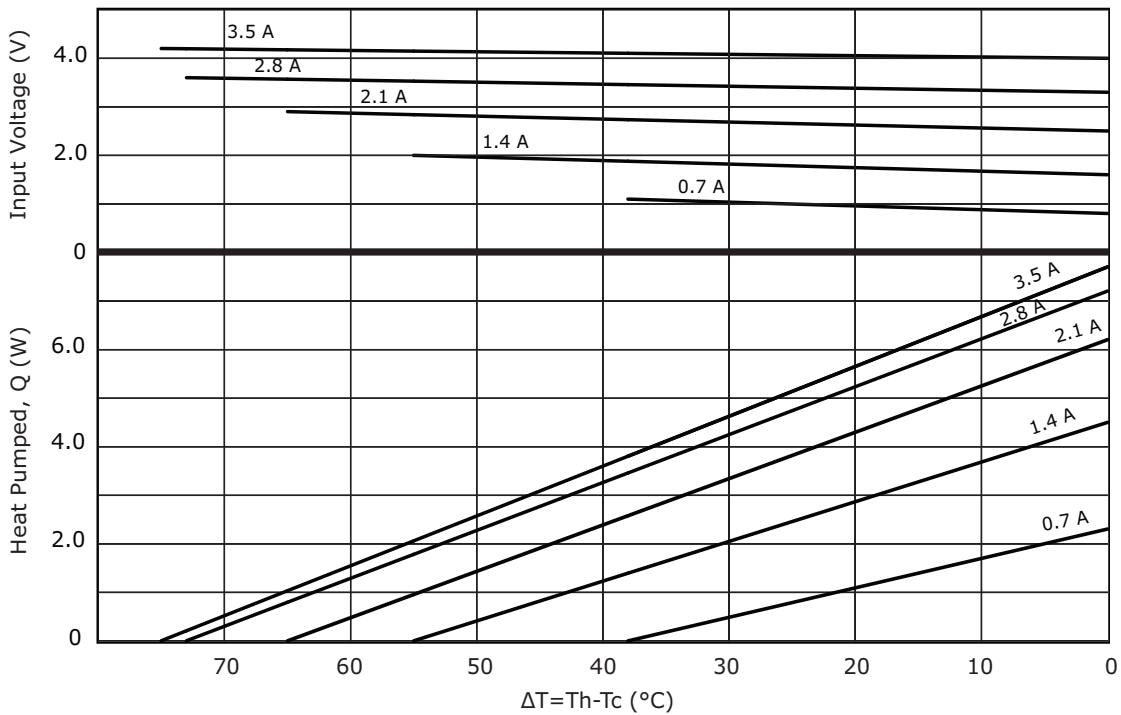
### CP35147 PERFORMANCE (Th=50°C)



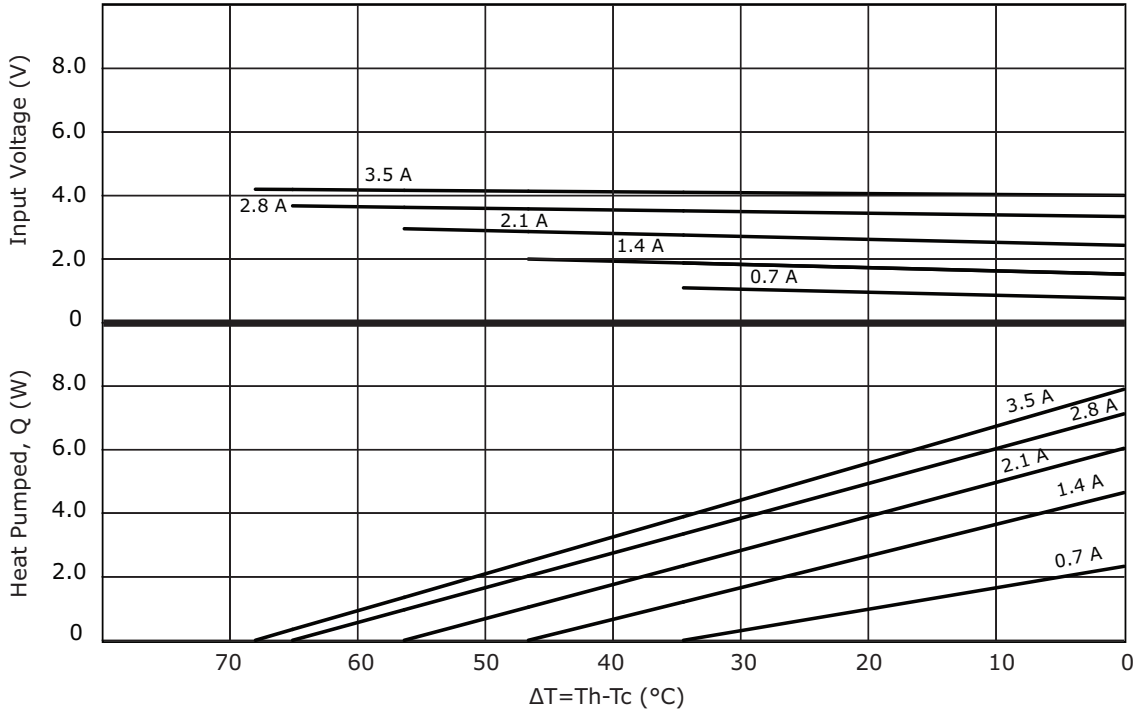
## CP35247 PERFORMANCE (Th=27°C)



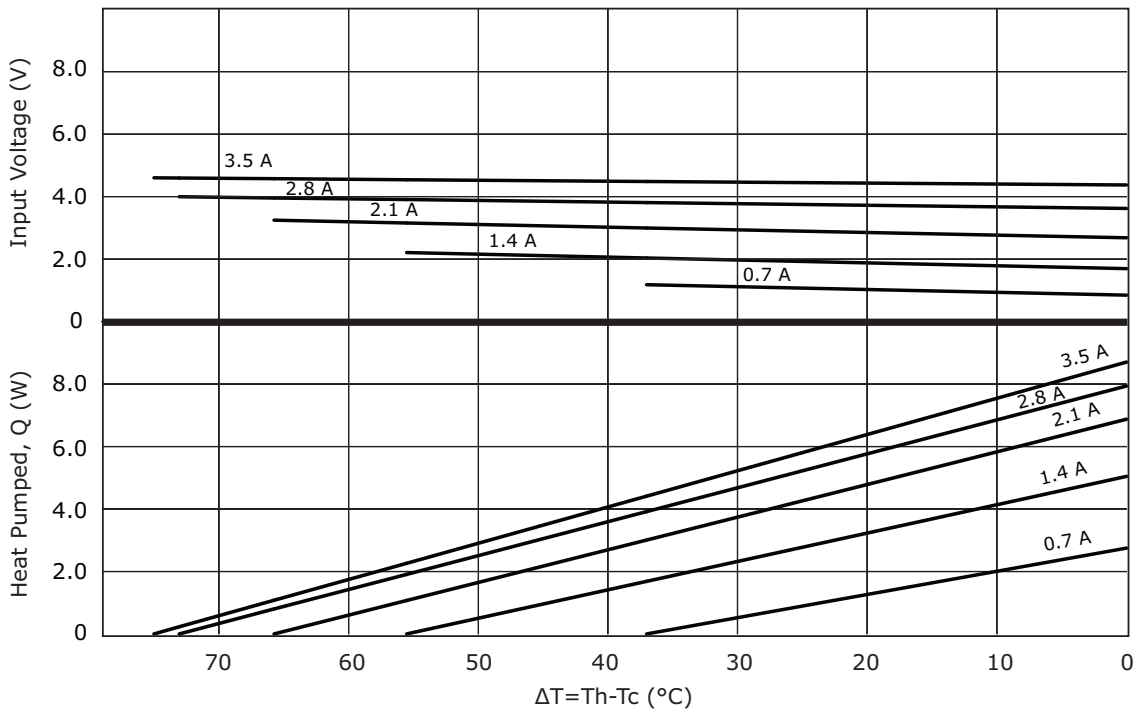
## CP35247 PERFORMANCE (Th=50°C)



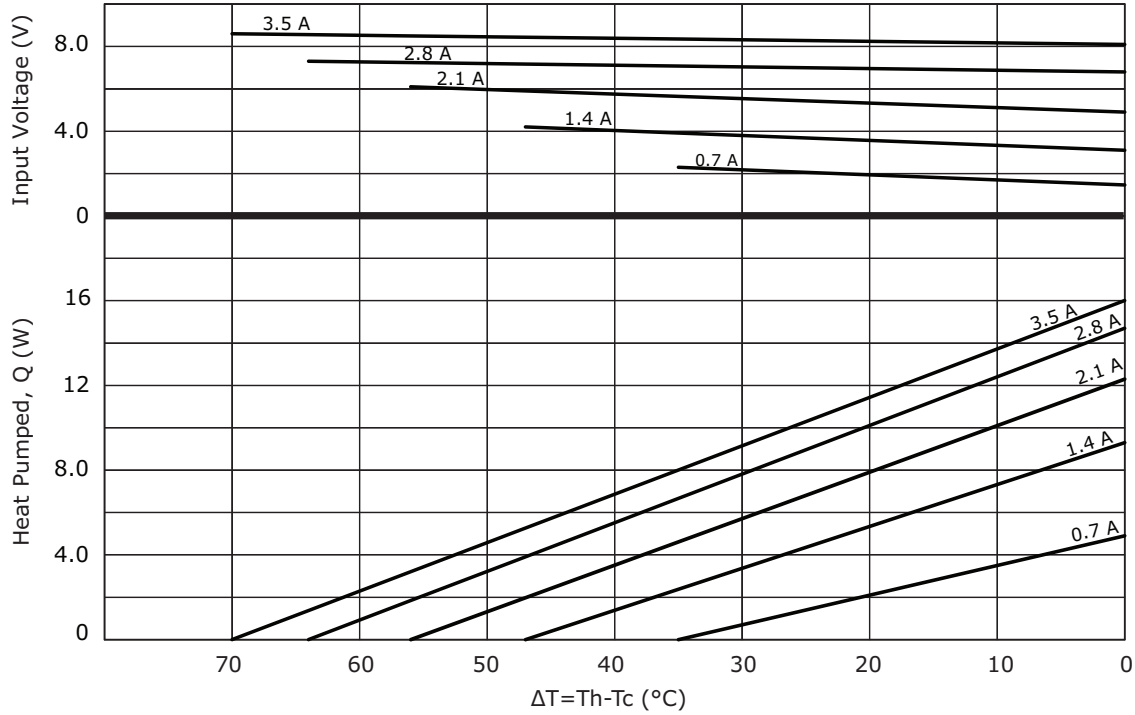
### CP35301547 PERFORMANCE (Th=27°C)



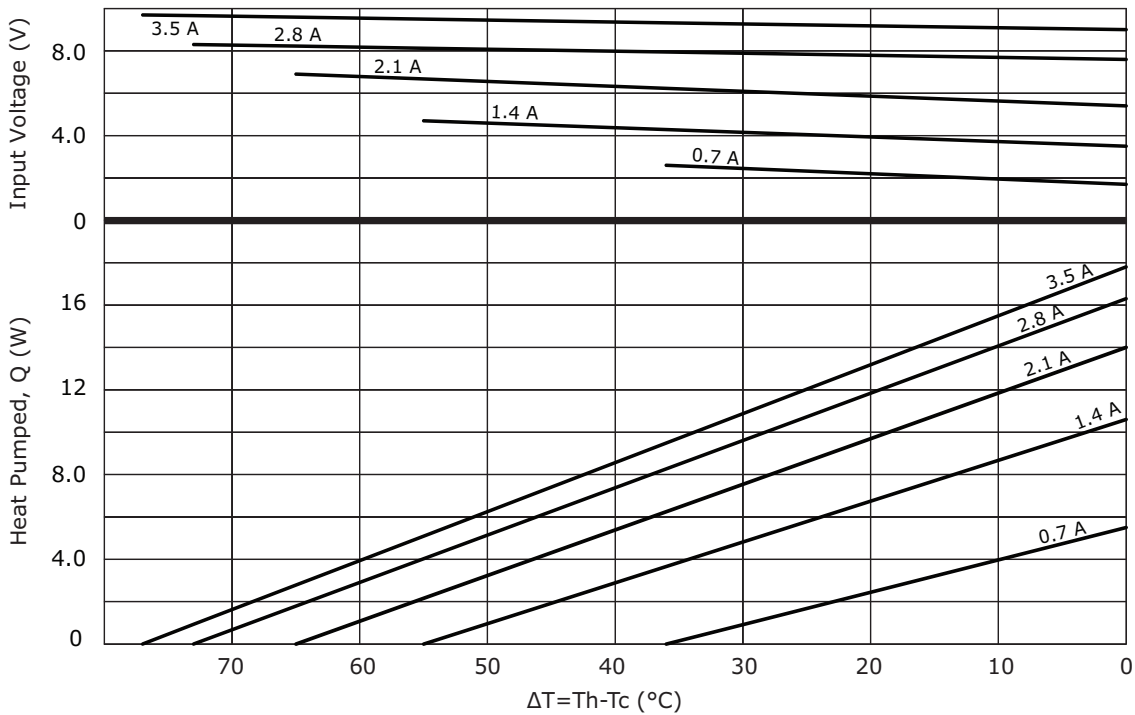
### CP35301547 PERFORMANCE (Th=50°C)



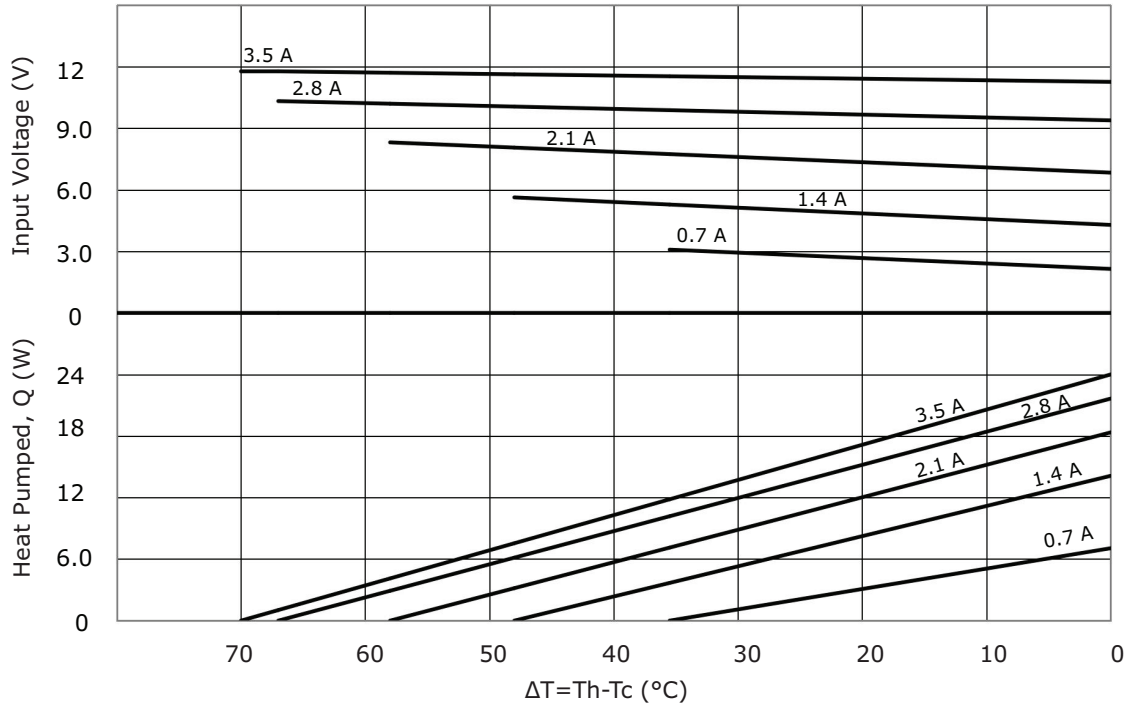
## CP35347 PERFORMANCE (Th=27°C)



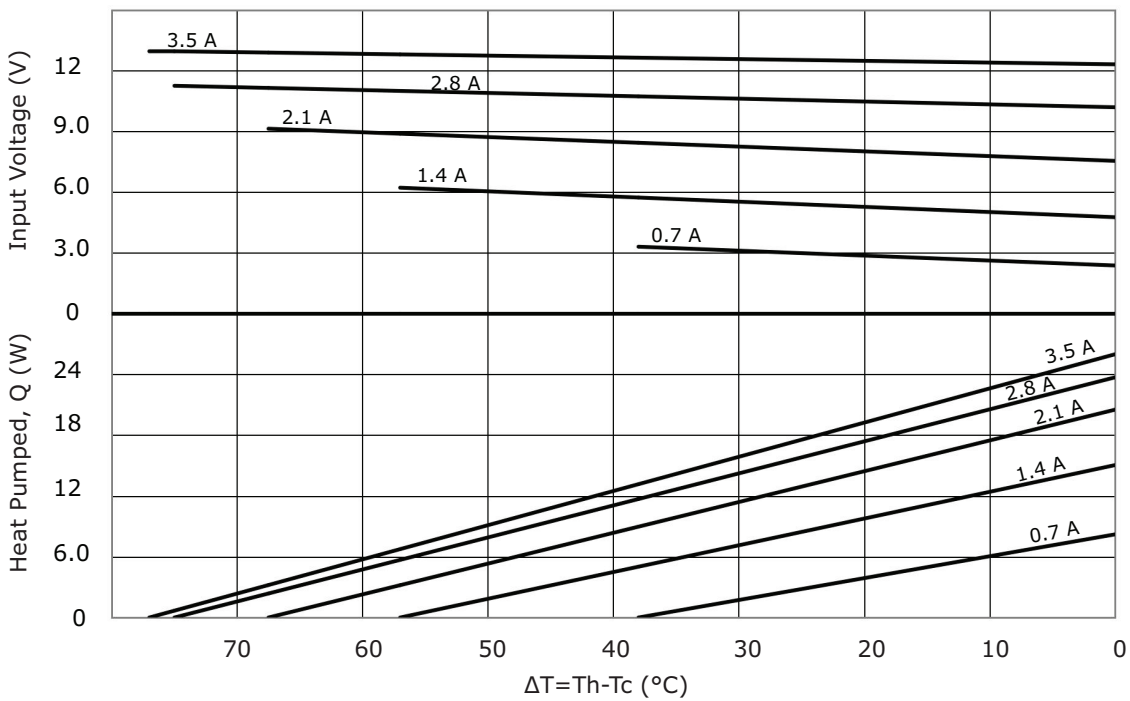
## CP35347 PERFORMANCE (Th=50°C)



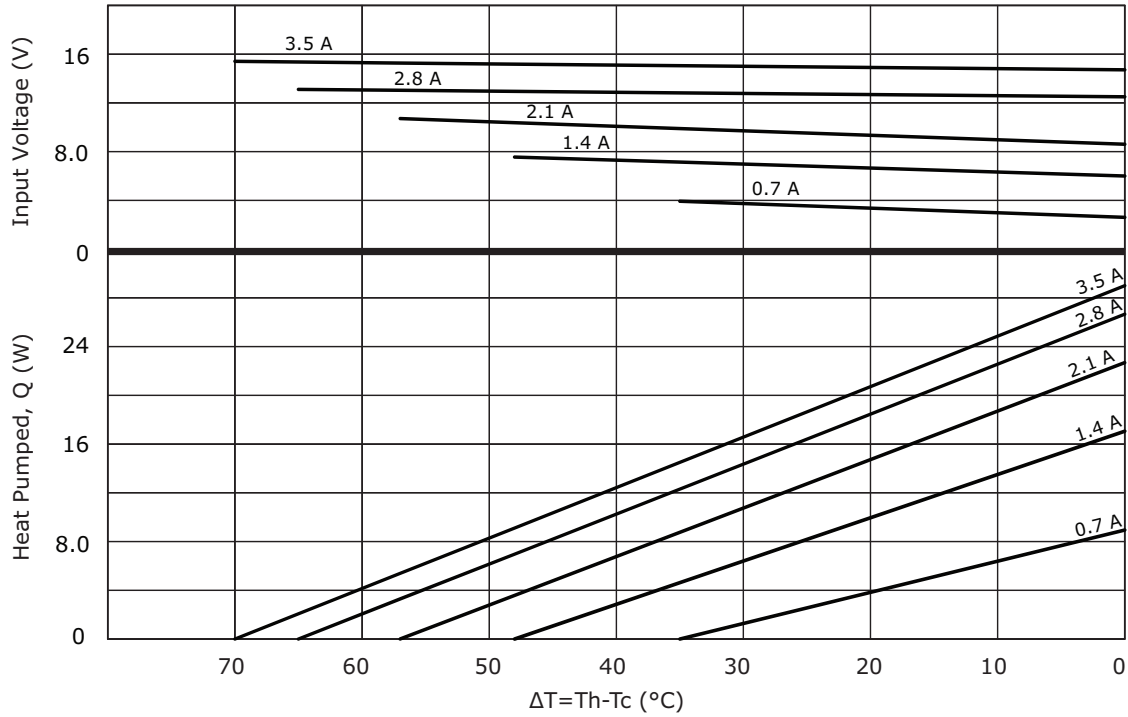
## CP353047 PERFORMANCE (Th=27°C)



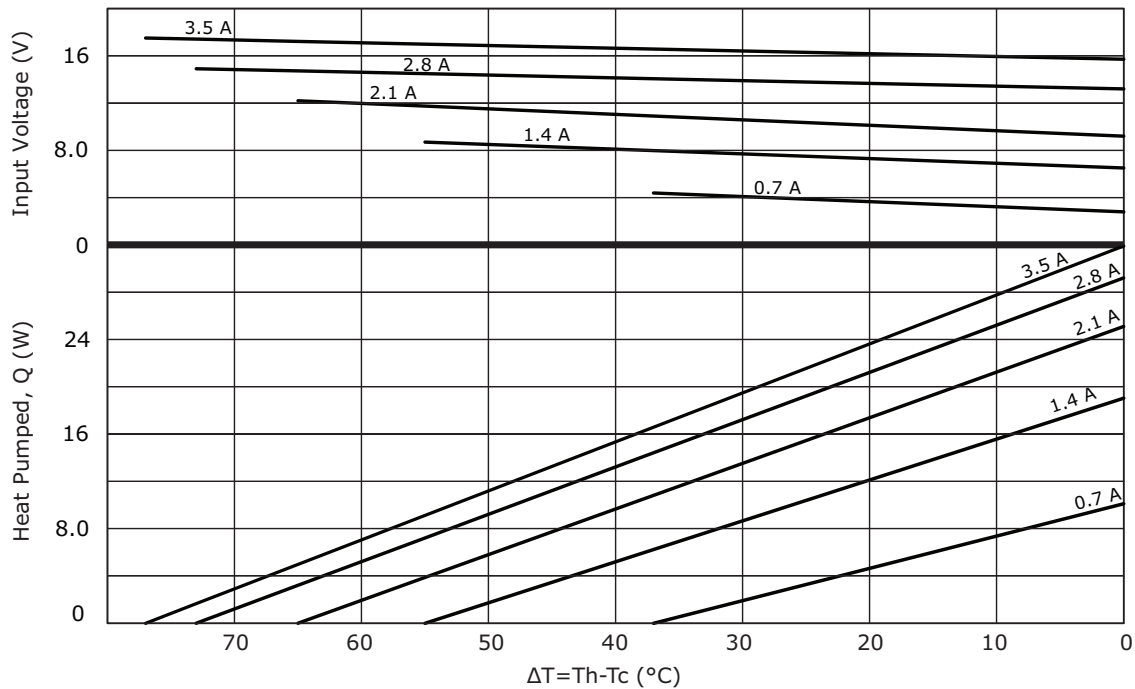
## CP353047 PERFORMANCE (Th=50°C)



## CP35447 PERFORMANCE (Th=27°C)

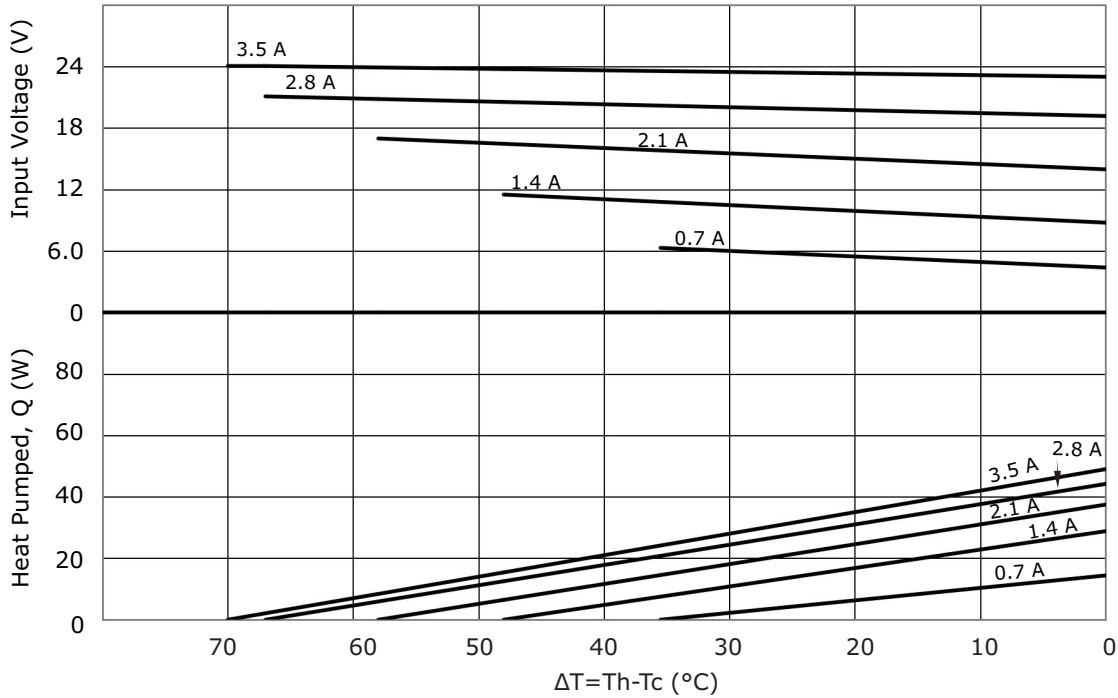


## CP35447 PERFORMANCE (Th=50°C)

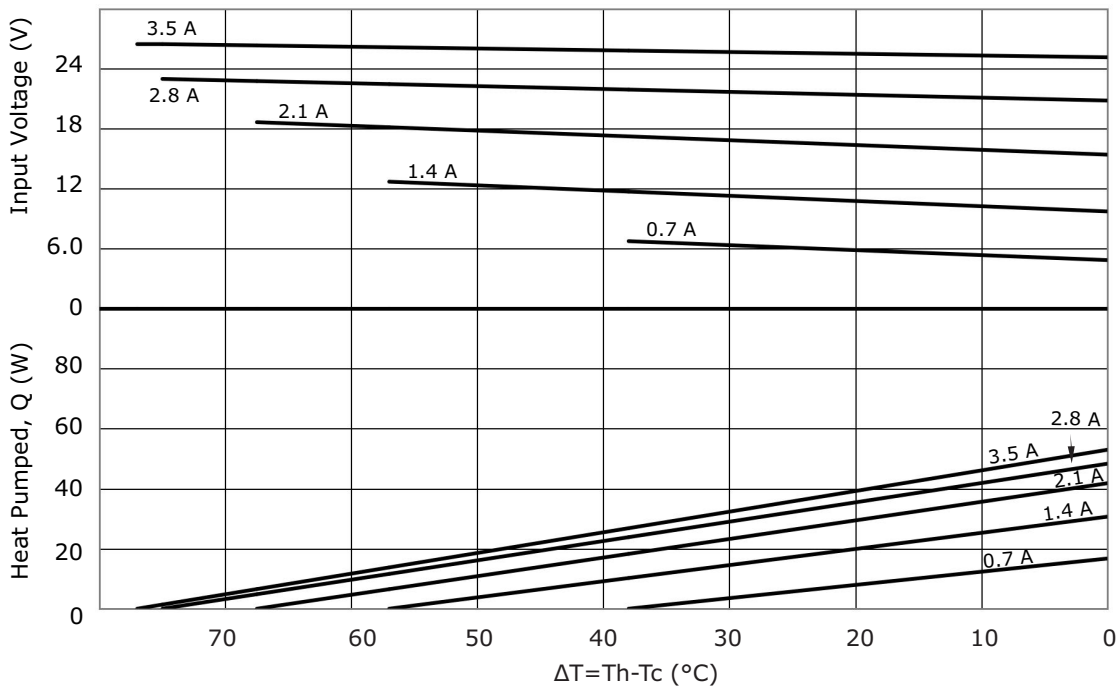




## CP354047 PERFORMANCE (Th=27°C)



## CP354047 PERFORMANCE (Th=50°C)



## REVISION HISTORY

rev.	description	date
1.0	initial release	09/08/2016
1.01	changed models CP35347 & CP35447 to arcTEC™ structure	12/01/2017
1.02	added models CP353047 & CP354047, brand update	10/18/2019
1.03	logo, datasheet style update	08/05/2022

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



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