

**SERIES:** CP70 | **DESCRIPTION:** PELTIER MODULE

**FEATURES**

- arcTEC™ structure on select models
- 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 [Ω±10%]	output Qmax <sup>4</sup>		output ΔTmax <sup>5</sup>	
				T <sub>n</sub> =27°C [W]	T <sub>n</sub> =50°C [W]	T <sub>h</sub> =27°C [°C]	T <sub>h</sub> =50°C [°C]
CP70137	2.1	7.0	0.24	7.5	8.3	68	75
CP70237	3.8	7.0	0.42	13.6	15.1	68	75
CP70301537	4.2	7.0	0.48	15.4	17.1	68	75
CP70337 <sup>6</sup>	8.6	7.0	1.0	31.0	34.6	70	77
CP70437 <sup>6</sup>	15.4	7.0	1.75	55.0	60.5	70	77

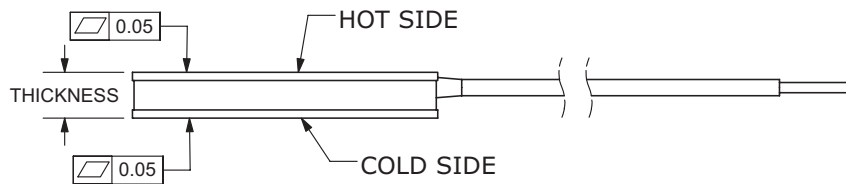
Notes: 1. Maximum voltage at ΔT max and T<sub>n</sub>=27°C  
 2. Maximum current to achieve ΔT max  
 3. Measured by AC 4-terminal method at 25°C  
 4. Maximum heat absorbed at cold side occurs at I<sub>max</sub>, V<sub>max</sub>, and ΔT=0°C  
 5. Maximum temperature difference occurs at I<sub>max</sub>,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

## SPECIFICATIONS

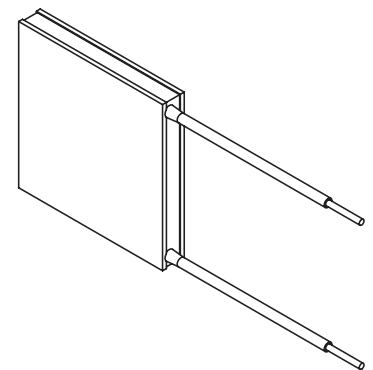
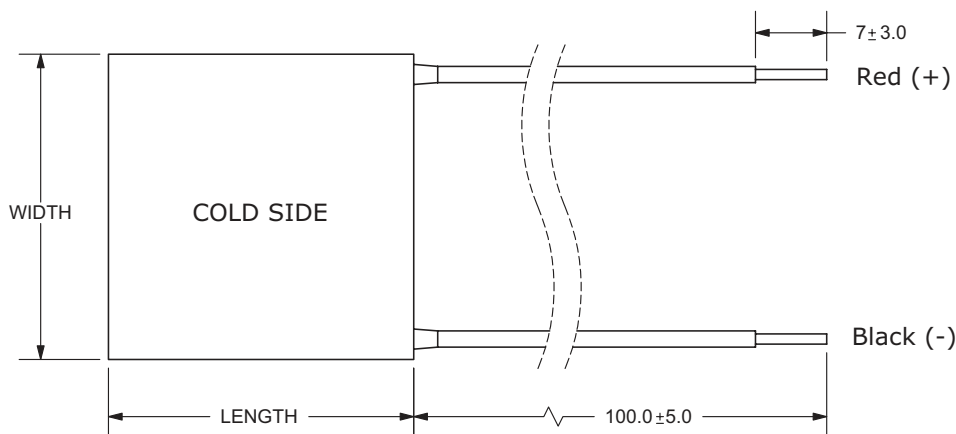
parameter	conditions/description	min	typ	max	units
solder melting temperature	connection between thermoelectric pairs	235			°C
assembly compression				1	MPa
hot side plate				80	°C
RoHS	yes				

## MECHANICAL DRAWING

units: mm



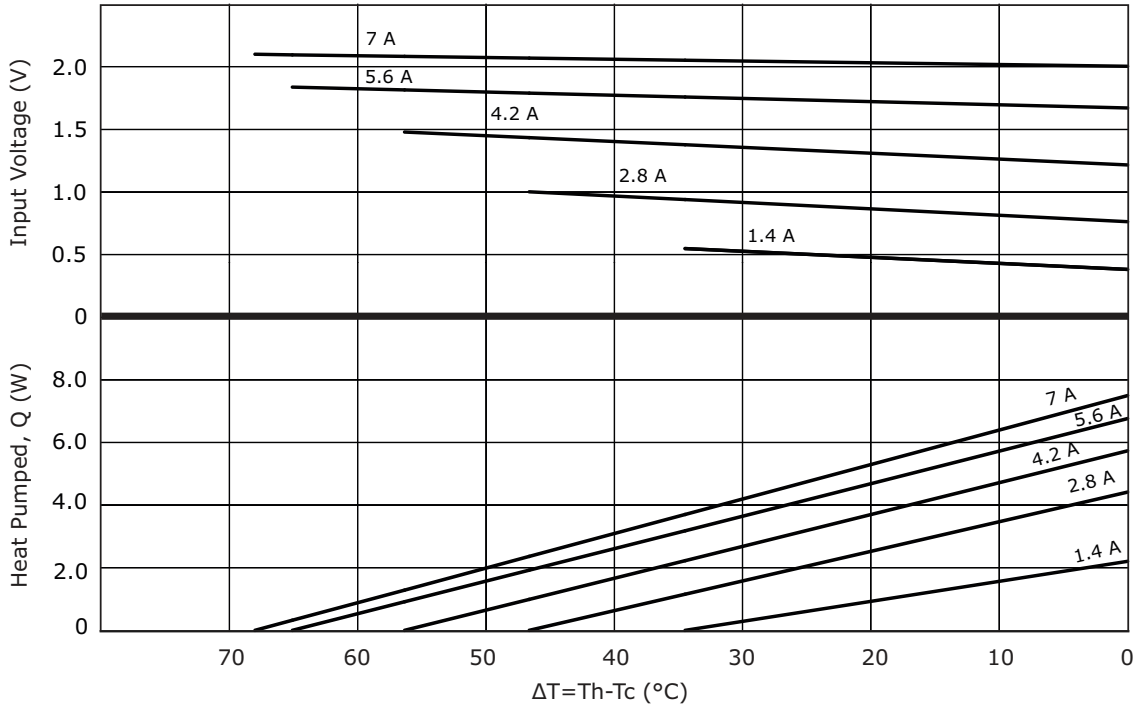
	MATERIAL	PLATING
ceramic plate	96% AL <sub>2</sub> O <sub>3</sub>	
wire leads	20 AWG	tin
sealer	silicon rubber 703 RTV (between cold and hot side plates)	
joint cover	silicon rubber 703 RTV	
marking	P/N & S/N printed on cold side surface	



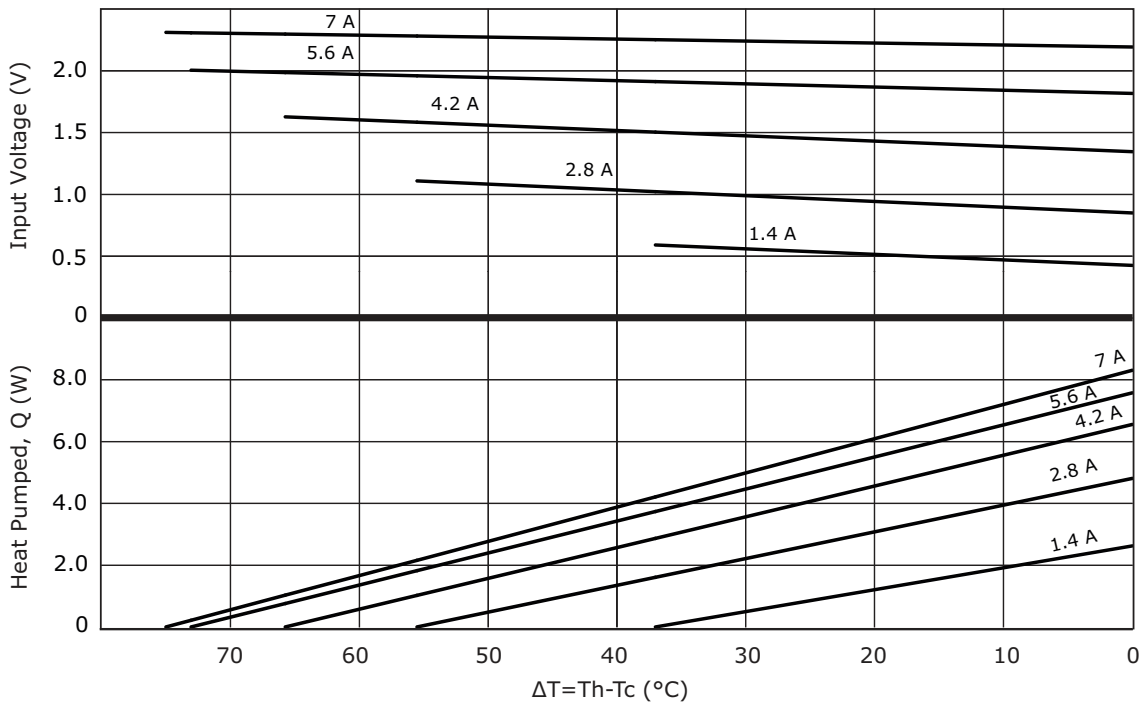
MODEL NO.	LENGTH (mm)	WIDTH (mm)	THICKNESS (mm)
CP70137	15 ±0.3	15 ±0.3	3.7 ±0.1
CP70237	20 ±0.3	20 ±0.3	3.7 ±0.1
CP70301537	30 ±0.3	15 ±0.3	3.7 ±0.1
CP70337 <sup>1</sup>	30 ±0.3	30 ±0.3	3.7 ±0.1
CP70437 <sup>1</sup>	40 ±0.3	40 ±0.3	3.7 ±0.1

Notes: 1. Wire lead strip length on models CP70337 & CP70437 is 10 ±3.0 mm.

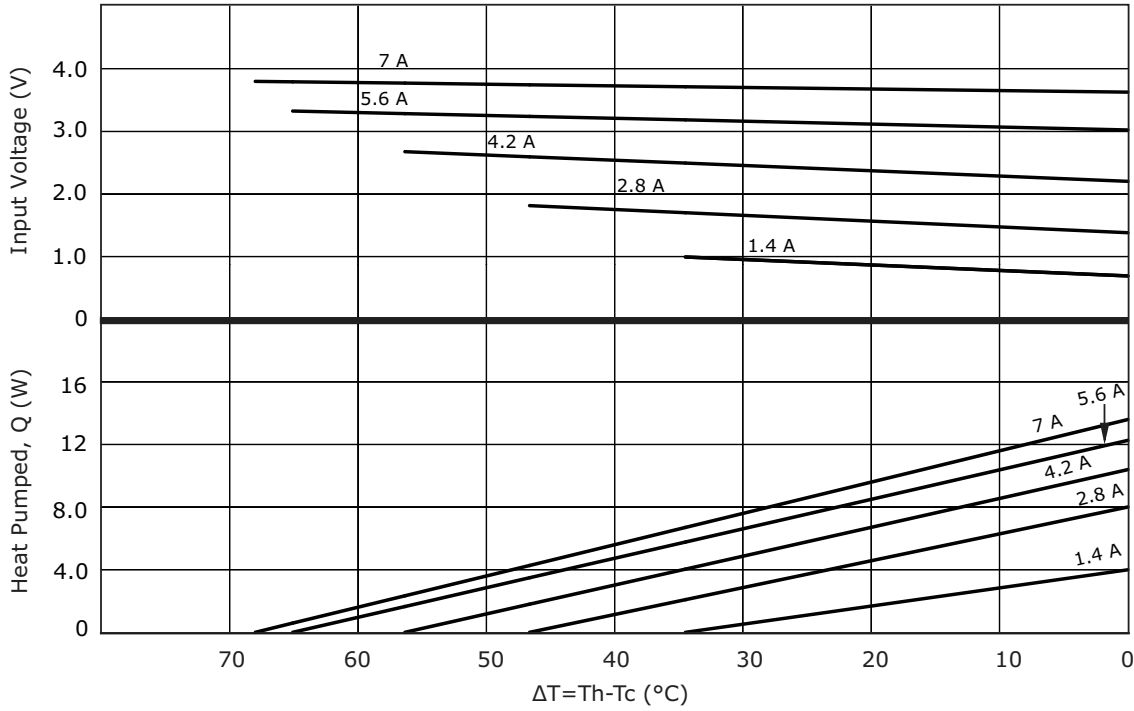
## CP70137 PERFORMANCE (Th=27°C)



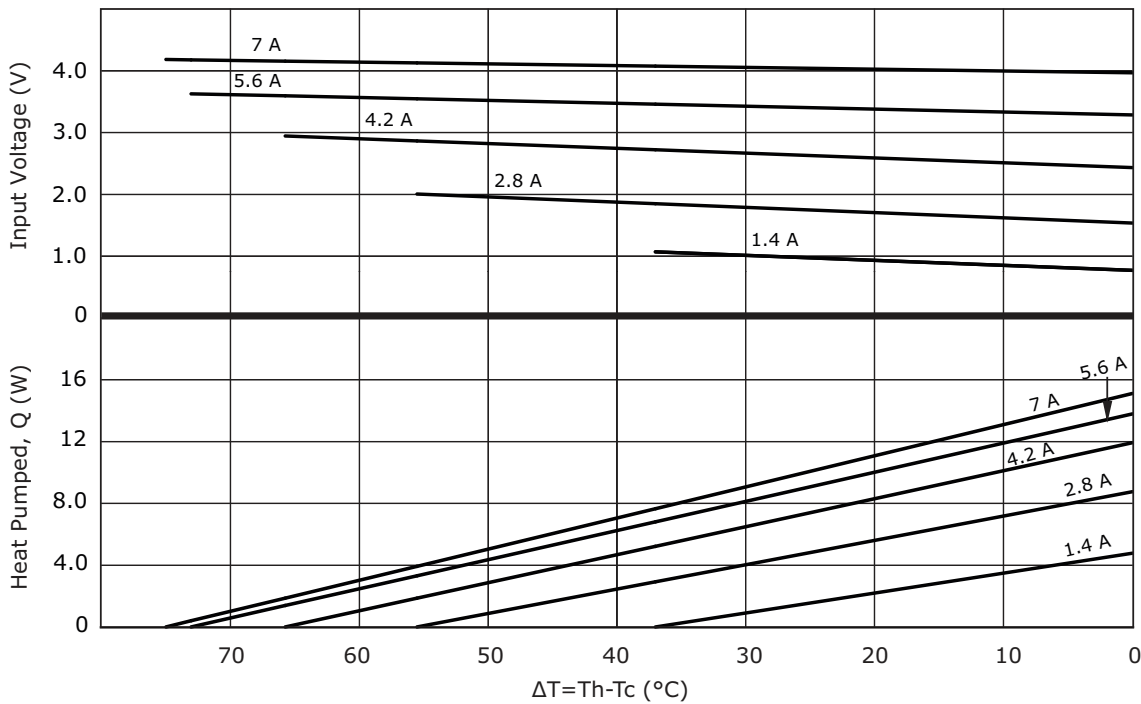
## CP70137 PERFORMANCE (Th=50°C)



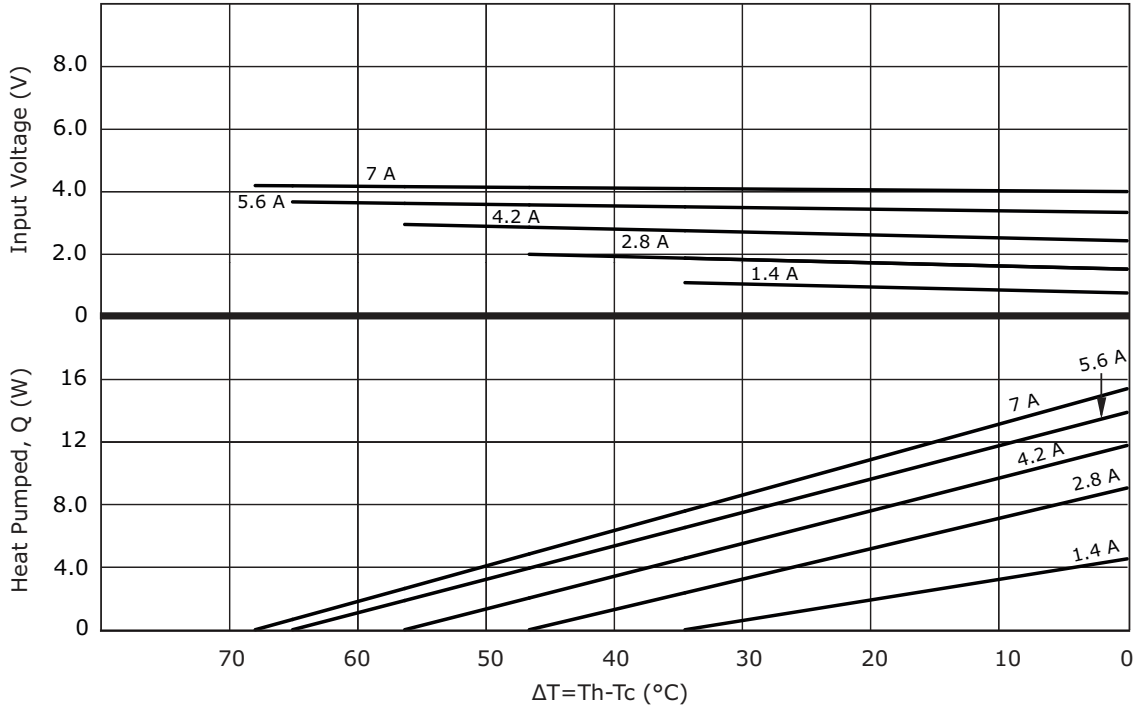
## CP70237 PERFORMANCE (Th=27°C)



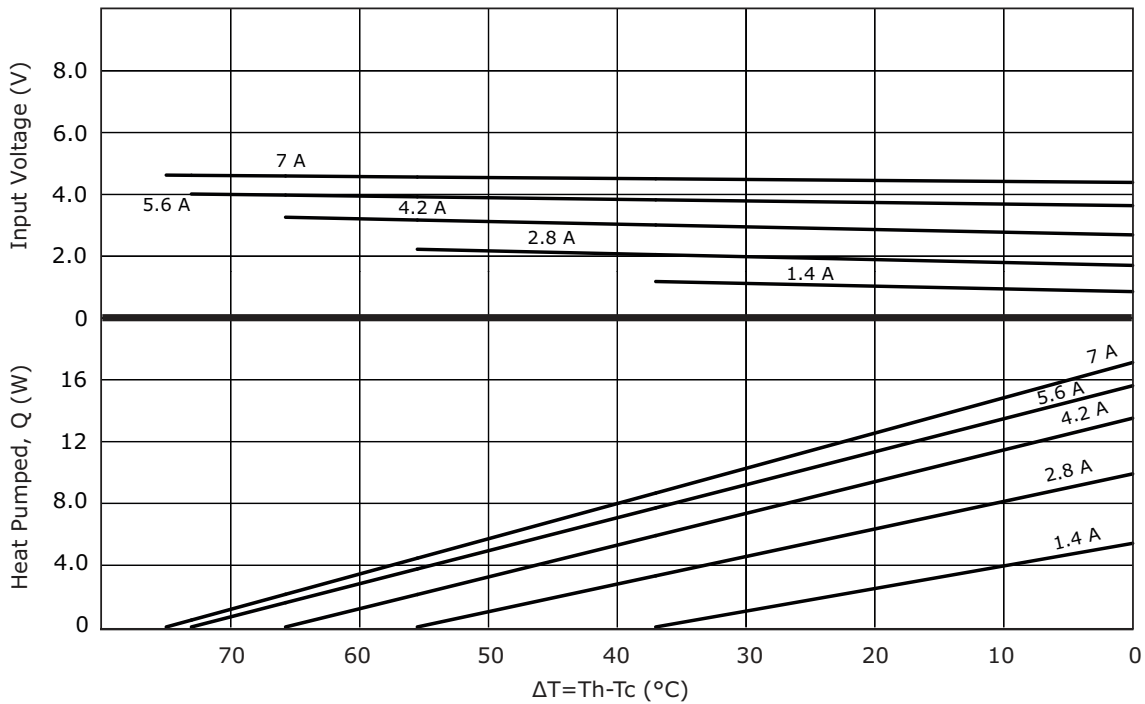
## CP70237 PERFORMANCE (Th=50°C)



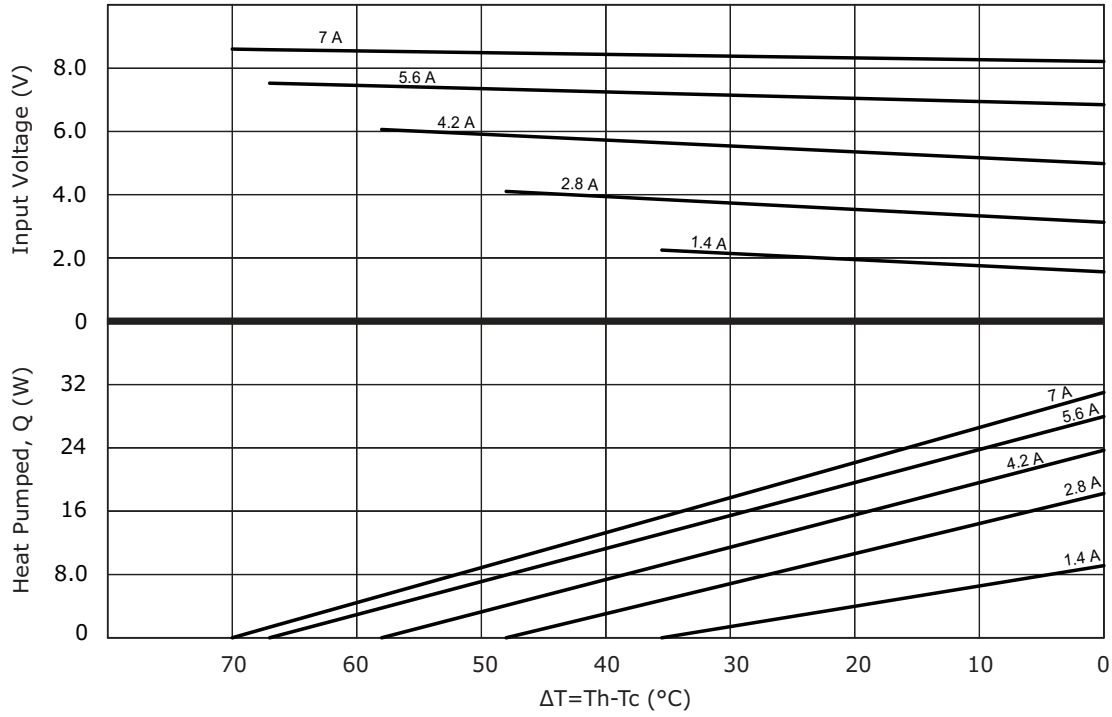
### CP70301537 PERFORMANCE (Th=27°C)



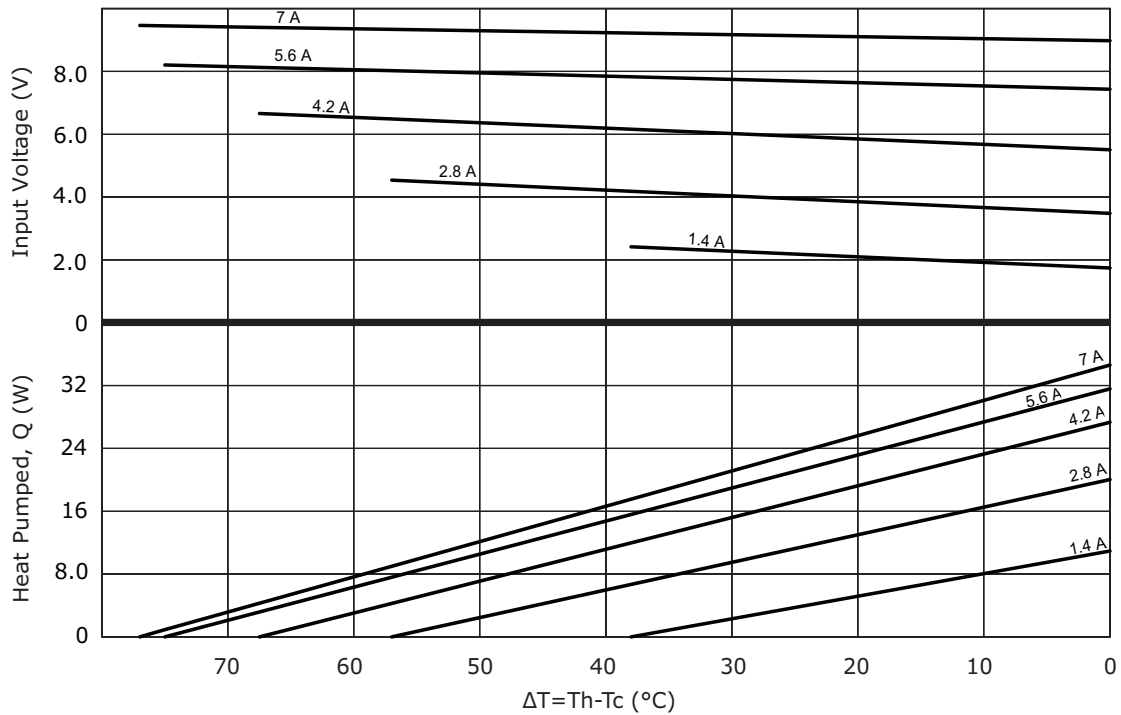
### CP70301537 PERFORMANCE (Th=50°C)



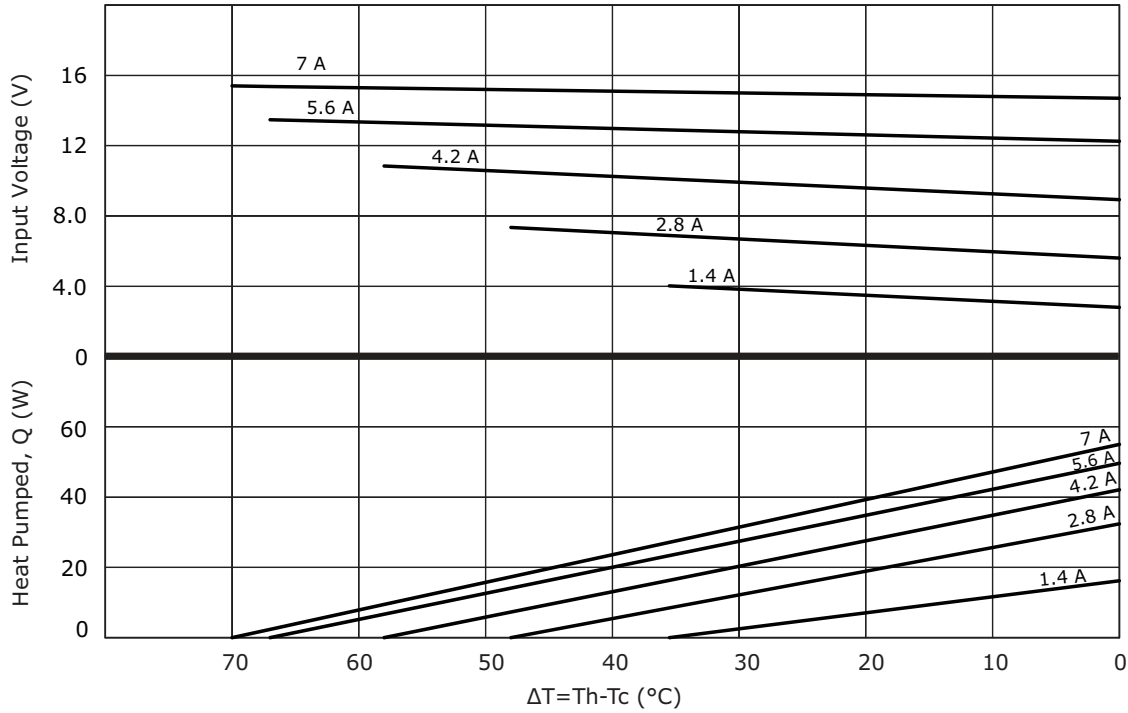
### CP70337 PERFORMANCE (Th=27°C)



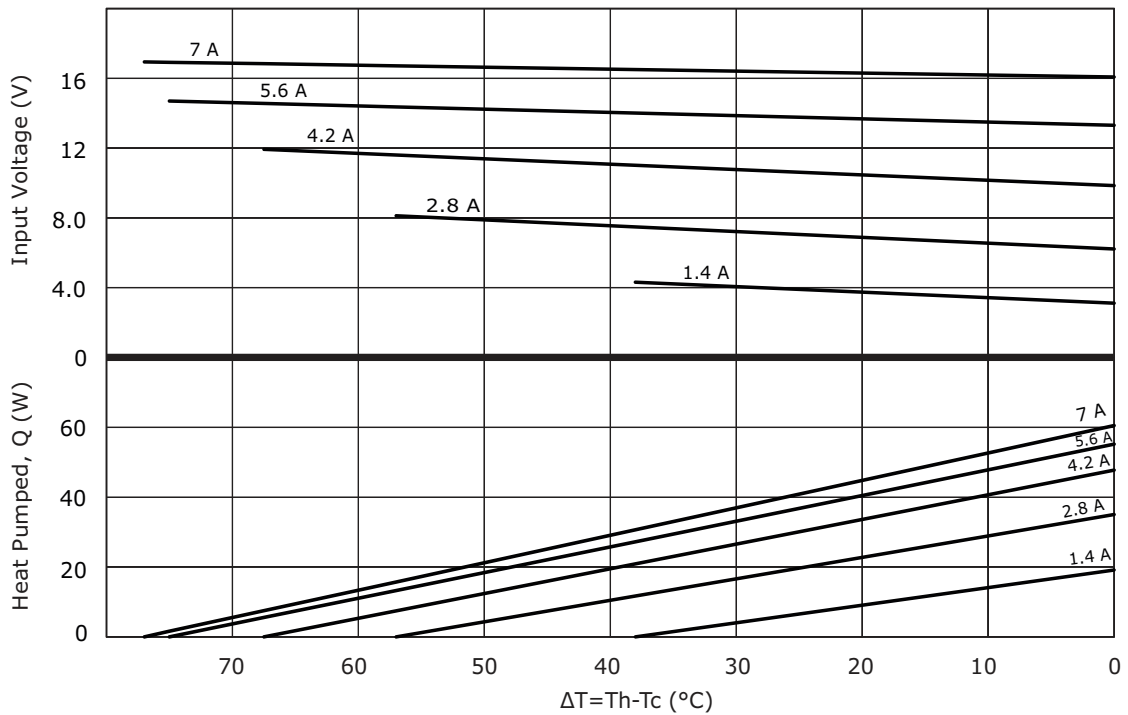
### CP70337 PERFORMANCE (Th=50°C)



## CP70437 PERFORMANCE (Th=27°C)



## CP70437 PERFORMANCE (Th=50°C)



## REVISION HISTORY

rev.	description	date
1.0	initial release	09/08/2016
1.01	changed models CP70337 & CP70437 to arcTEC™ structure	12/01/2017
1.02	changed thickness of CP70137, CP70237, CP70301537 models	09/19/2018
1.03	brand update	10/30/2019
1.04	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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