

Additional Resources: Product Page | 3D Model

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## SERIES: CP85 | DESCRIPTION: PELTIER MODULE

#### **FEATURES**

- $arcTEC^{™}$  structure on select models
- solid state device
- · precise temperature control
- quiet operation





MODEL	input voltage¹	input current²	internal resistance³	output Qmax <sup>4</sup>		output ∆Tmax⁵	
	<b>max</b> (Vdc)	max [A]	typ [ $\Omega$ ±10%]	T <sub>h</sub> =27°C (W)	T <sub>h</sub> =50°C (W)	T <u>,</u> =27°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 <sup>6</sup>	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

1. Maximum voltage at  $\Delta T$  max and  $T_h$ =27°C

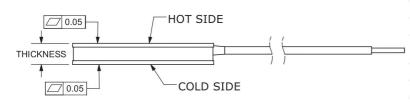
Maximum outrent to achieve ΔT max
Measured by AC 4-terminal method at 25°C
Maximum hard absorbed at cold side occurs at I<sub>max</sub>, V<sub>max</sub>, and ΔT=0°C
Maximum heat absorbed at cold side occurs at I<sub>max</sub>, V<sub>max</sub>, and Q=0W (ΔT max measured in a vacuum at 1.3 Pa)
Designed with arcTEC™ structure

## **SPECIFICATIONS**

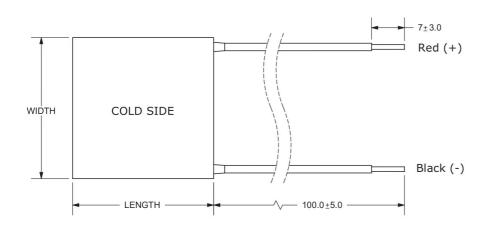
parameter	conditions/description	min	typ	max	units
solder melting temperature	connection between thermoelectric pairs	235			°C
assembly compression				1	MPa
hot side plate				80	°C
RoHS	yes				

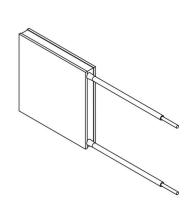
#### **MECHANICAL DRAWING**





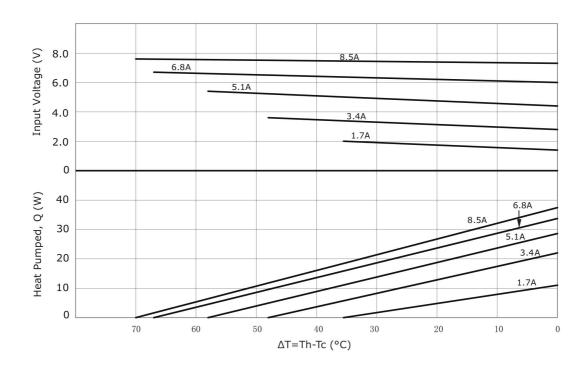
	MATERIAL	PLATING	
ceramic plate	96% AL <sub>2</sub> O <sub>3</sub>		
wire leads	20 AWG	tin	
sealer	silicon rubber 703 RTV (between cold and hot side plates)		
joint cover	silicon rubber 703 RTV		
marking	P/N & S/N printed on cold side surface		



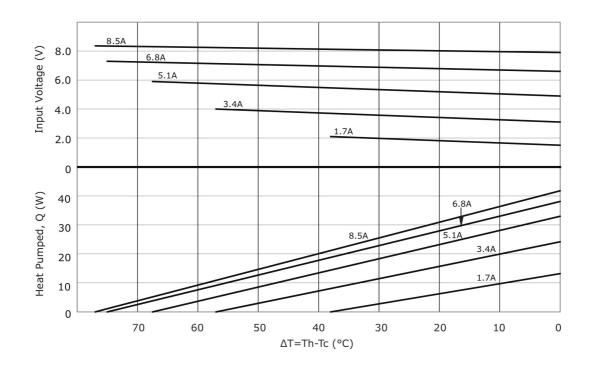


MODEL NO.	LENGTH (mm)	WIDTH (mm)	THICKNESS (mm)
CP85204035	20 ±0.3	40 ±0.3	3.5 ±0.1
CP85301535	30 ±0.3	15 ±0.3	3.5 ±0.1
CP85435	40 ±0.3	40 ±0.3	3.5 ±0.1
CP85138	15 ±0.3	15 ±0.3	3.74 ±0.1
CP85238	20 ±0.3	20 ±0.3	3.74 ±0.1
CP85338	30 ±0.3	30 ±0.3	3.74 ±0.1
CP85438	40 ±0.3	40 ±0.3	3.74 ±0.1

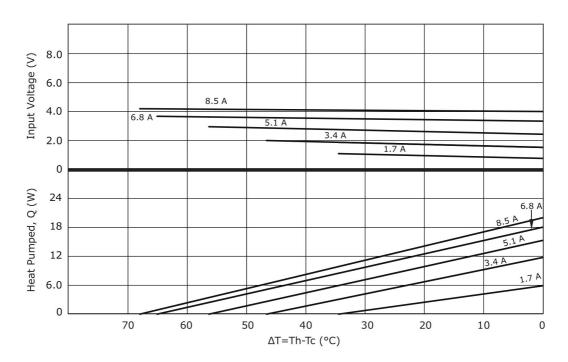
#### CP85204035 PERFORMANCE (Th=27°C)



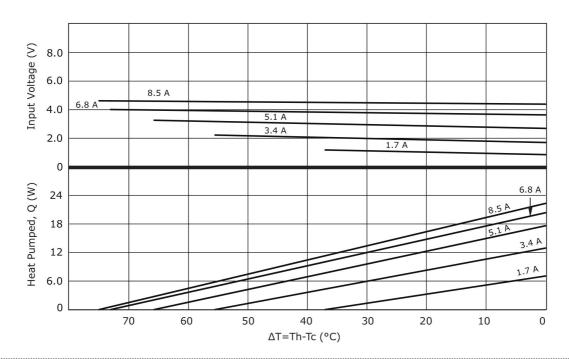
## CP85204035 PERFORMANCE (Th=50°C)



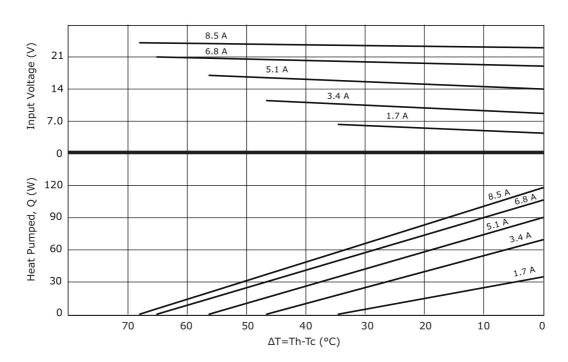
## CP85301535 PERFORMANCE (Th=27°C)



## CP85301535 PERFORMANCE (Th=50°C)



## CP85435 PERFORMANCE (Th=27°C)



# CP85435 PERFORMANCE (Th=50°C)

