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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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date 09/02/2016

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#### **SERIES:** CP70 **DESCRIPTION: PELTIER MODULE**

#### **FEATURES**

- solid state device
- precise temperature control
- quiet operation





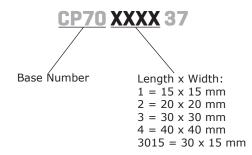
MODEL	input voltage¹	input current²	•	•	•	
	max (Vdc)	max (A)	T <sub>h</sub> =27°C (W)	T <sub>h</sub> =50°C (W)	T <sub>h</sub> =27°C (°C)	T <sub>h</sub> =50°C (°C)
CP70137	2.1	7.0	7.5	8.3	68	75
CP70237	3.8	7.0	13.6	15.1	68	75
CP70301537	4.2	7.0	15.4	17.1	68	75
CP70337	8.6	7.0	31.0	34.6	68	75
CP70437	15.4	7.0	55.0	60.5	68	75

Notes:

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

- Maximum voltage at Δ1 flox and I<sub>h</sub>=2.7
  Maximum current to achieve ΔT max
  Maximum heat absorbed at cold side occurs at I<sub>max</sub>, V<sub>max</sub>, and ΔT=0°C
  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)

#### **PART NUMBER KEY**

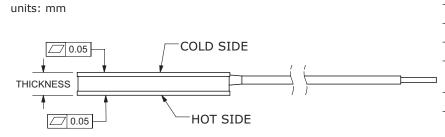


#### **SPECIFICATIONS**

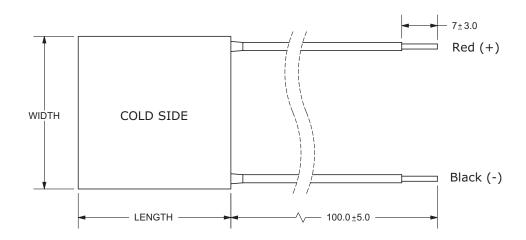
parameter	conditions/description	min	typ	max	units
	CP70137	0.216	0.24	0.264	Ω
	CP70237	0.378	0.42	0.462	Ω
internal resistance <sup>1</sup>	CP70301537	0.432	0.48	0.528	Ω
	CP70337	0.9	1.0	1.1	Ω
	CP70437	1.575	1.75	1.925	Ω
solder melting temperature	connection between thermoelectric pairs	138			°C
assembly compression				1	MPa
hot side plate				80	°C
RoHS	2011/65/EU				

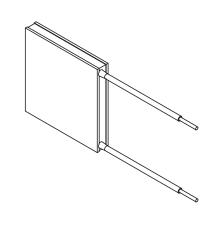
1. Measured by AC 4-terminal method at 25°C Note:

#### **MECHANICAL DRAWING**



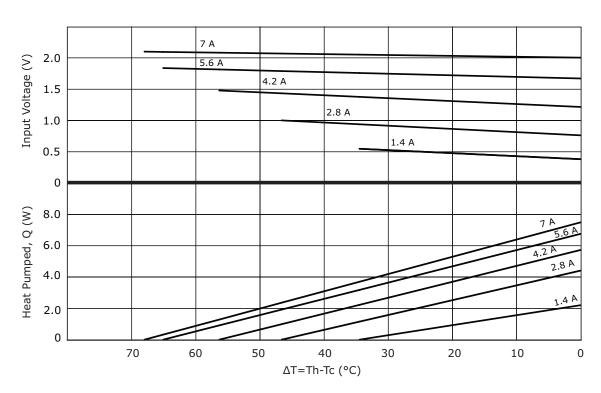
	MATERIAL	PLATING	
ceramic plate	96% AL <sub>2</sub> O <sub>3</sub>		
wire leads	20 AWG	tin	
sealer	silicon rubber 703 RTV (between cold and hot side plates)		
joint cover	silicon rubber 703	RTV	
marking	P/N & S/N printed surface	S/N printed on cold side	



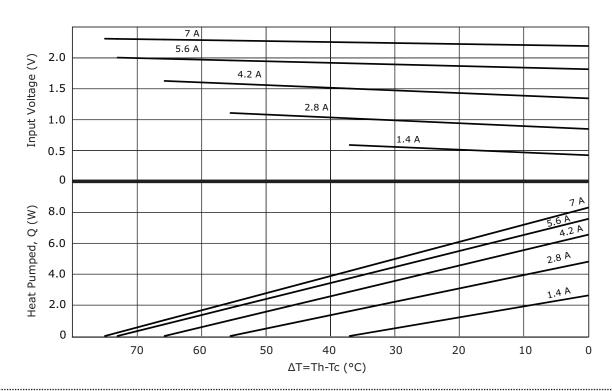


MODEL NO.	LENGTH (mm)	WIDTH (mm)	THICKNESS (mm)
CP70137	15 ±0.3	15 ±0.3	3.8 ±0.1
CP70237	20 ±0.3	20 ±0.3	3.8 ±0.1
CP70301537	30 ±0.3	15 ±0.3	3.8 ±0.1
CP70337	30 ±0.3	30 ±0.3	3.8 ±0.1
CP70437	40 ±0.3	40 ±0.3	3.8 ±0.1

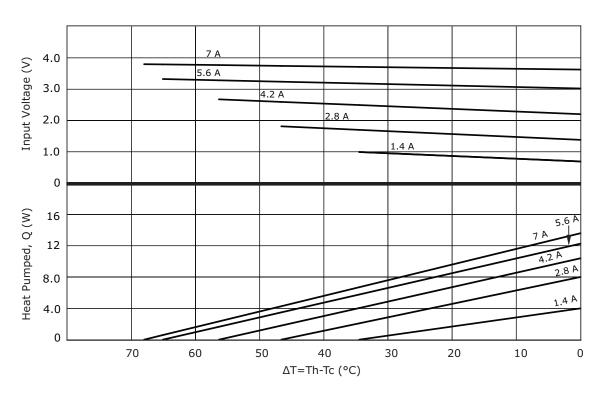
#### **CP70137 PERFORMANCE (Th=27°C)**



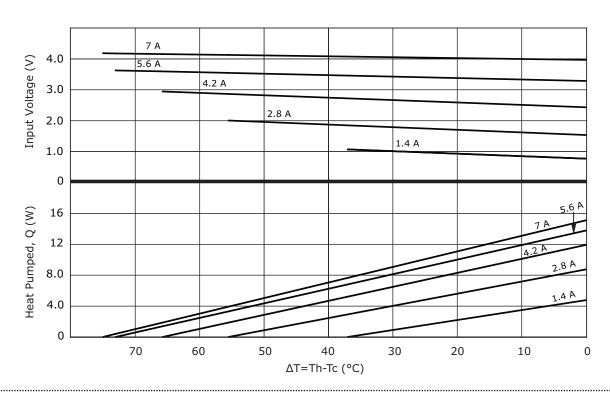
# CP70137 PERFORMANCE (Th=50°C)



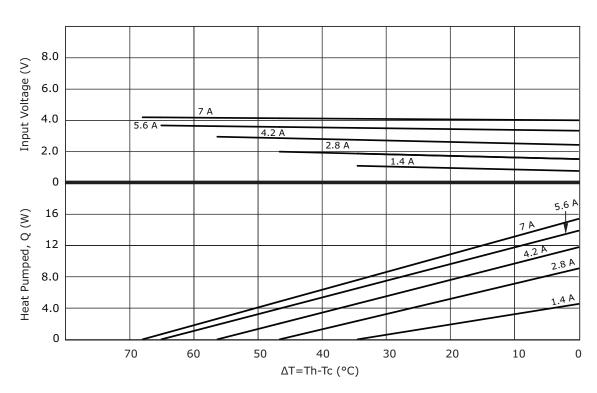
#### **CP70237 PERFORMANCE (Th=27°C)**



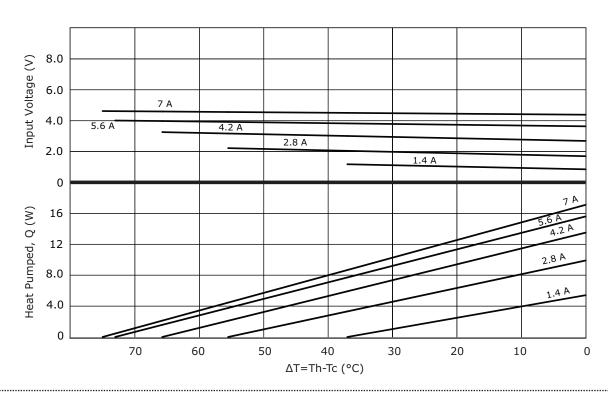
# CP70237 PERFORMANCE (Th=50°C)



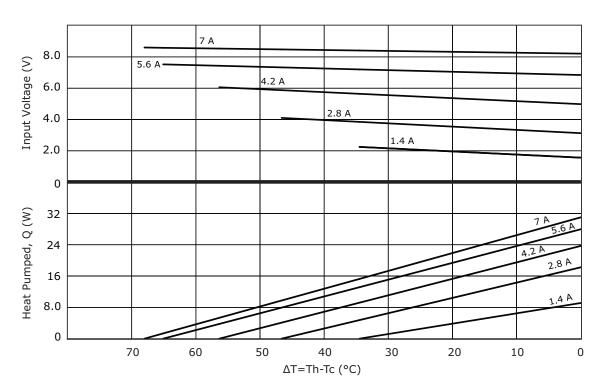
#### CP70301537 PERFORMANCE (Th=27°C)



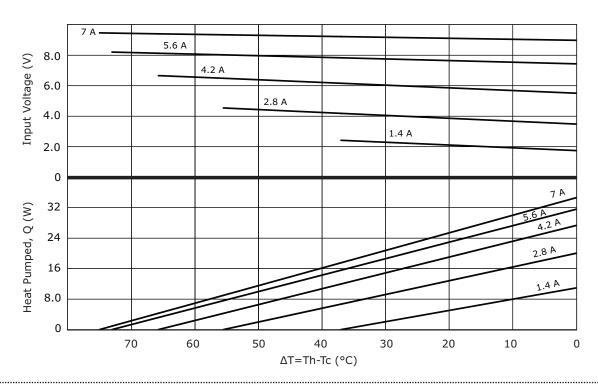
# CP70301537 PERFORMANCE (Th=50°C)



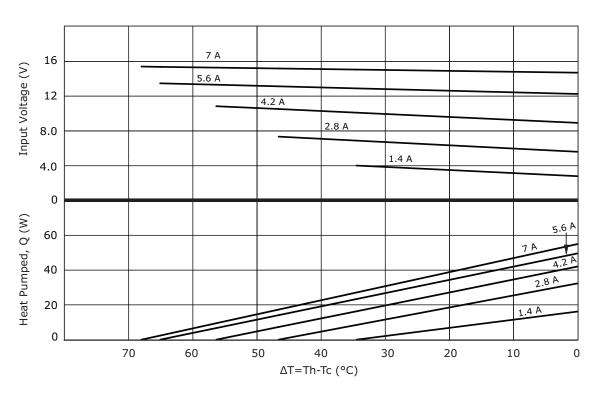
#### **CP70337 PERFORMANCE (Th=27°C)**



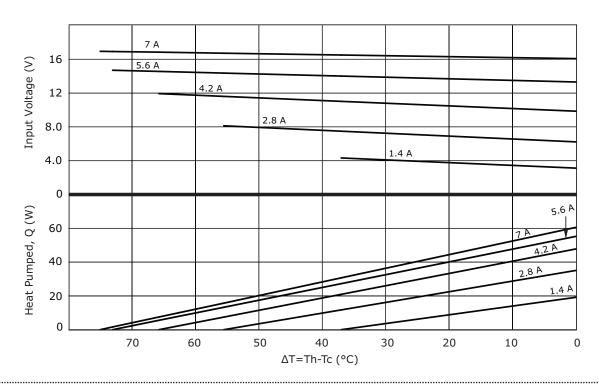
# CP70337 PERFORMANCE (Th=50°C)



#### **CP70437 PERFORMANCE (Th=27°C)**



# CP70437 PERFORMANCE (Th=50°C)



#### **REVISION HISTORY**

rev.	description	date
1.0	initial release	09/02/2016

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



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