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CUI DEVICES

date 10/30/2019

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SERIES: CP70 **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 Qmax⁴			tput nax⁵
	max (Vdc)	max (A)	typ $(\Omega \pm 10\%)$	T _h =27°C (W)	T _h =50°C (W)	T_h=27°C (°C)	T _h =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 ⁶	8.6	7.0	1.0	31.0	34.6	70	77
CP70437 ⁶	15.4	7.0	1.75	55.0	60.5	70	77

Notes:

- 1. Maximum voltage at ΔT max and T_h =27°C

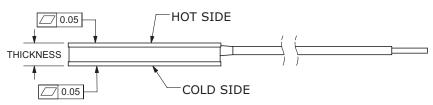
- Maximum voltage at ΔT max and I_m=27 C
 Maximum current to achieve ΔT max
 Measured by AC 4-terminal method at 25°C
 Maximum heat absorbed at cold side occurs at I_{max}, V_{max}, and ΔT=0°C
 Maximum temperature difference occurs at I_{max}, V_{max}, and Q=0W (ΔT max measured in a vacuum at 1.3 Pa)
 Designed with arcTECTM structure

SPECIFICATIONS

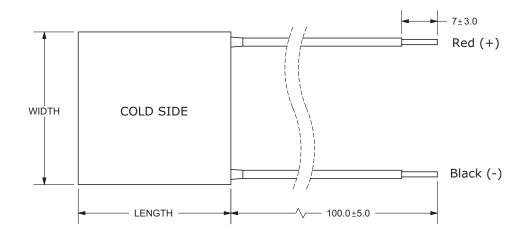
parameter	conditions/description	min	typ	max	units
solder melting temperature	connection between thermoelectric pairs	235			°C
assembly compression				1	MPa
hot side plate				80	°C
RoHS	yes				

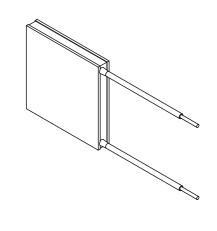
MECHANICAL DRAWING





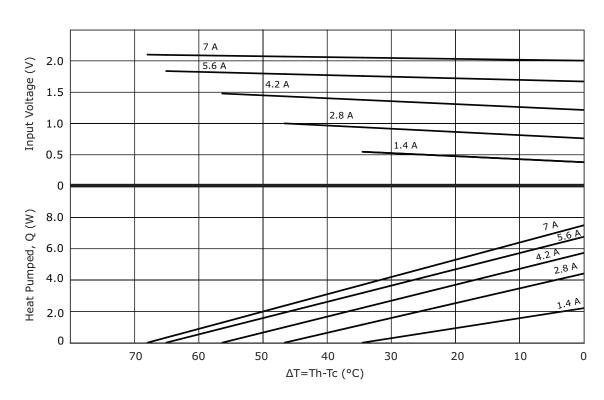
	MATERIAL	PLATING	
ceramic plate	96% AL ₂ O ₃		
wire leads	20 AWG	tin	
sealer	silicon rubber 703 RTV (between cold and hot side plates)		
joint cover	silicon rubber 703 RTV		
marking	P/N & S/N printed on cold side surface		



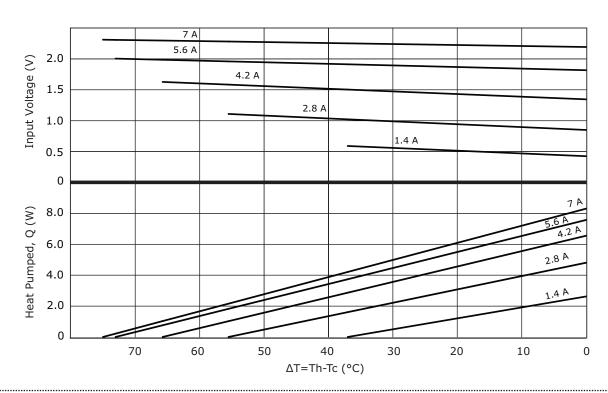


MODEL NO.	LENGTH (mm)	WIDTH (mm)	THICKNESS (mm)
CP70137	15 ±0.3	15 ±0.3	3.7 ±0.1
CP70237	20 ±0.3	20 ±0.3	3.7 ±0.1
CP70301537	30 ±0.3	15 ±0.3	3.7 ±0.1
CP70337 ¹	30 ±0.3	30 ±0.3	3.7 ±0.1
CP704371	40 ±0.3	40 ±0.3	3.7 ±0.1

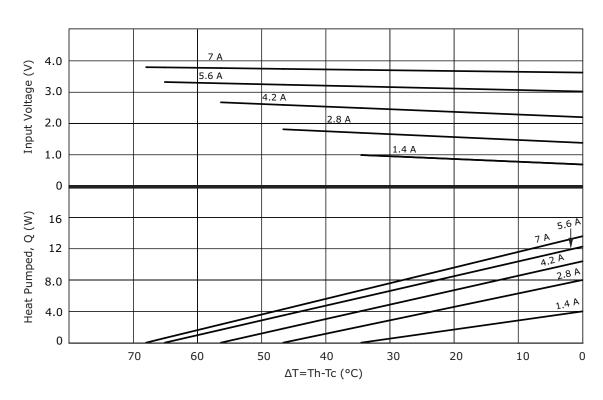
CP70137 PERFORMANCE (Th=27°C)



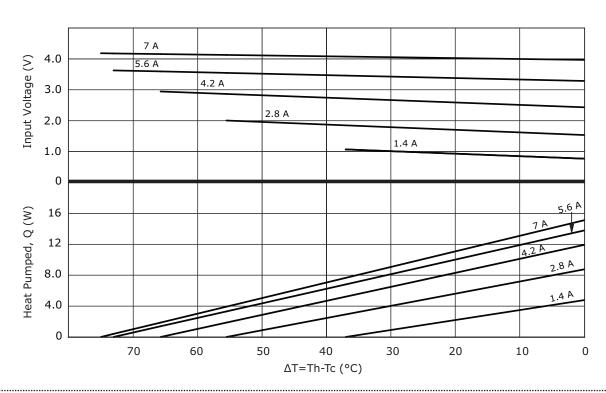
CP70137 PERFORMANCE (Th=50°C)



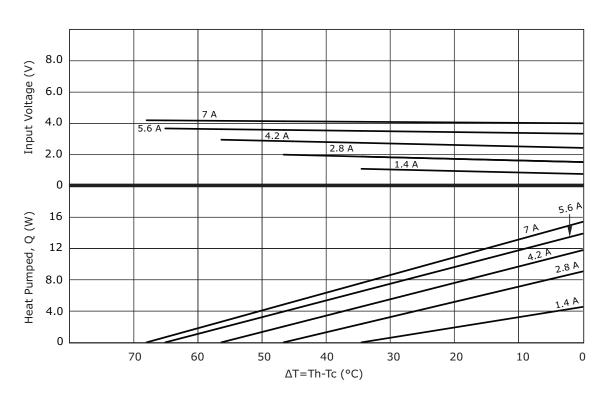
CP70237 PERFORMANCE (Th=27°C)



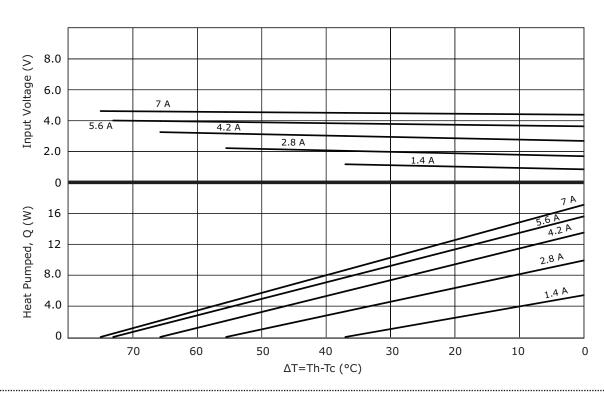
CP70237 PERFORMANCE (Th=50°C)



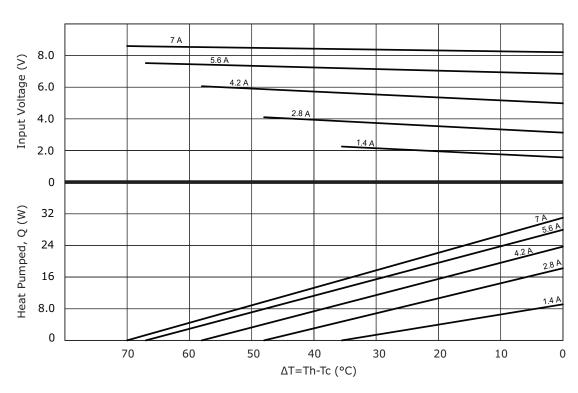
CP70301537 PERFORMANCE (Th=27°C)



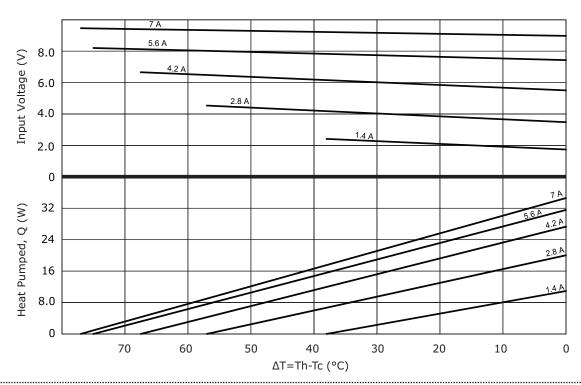
CP70301537 PERFORMANCE (Th=50°C)



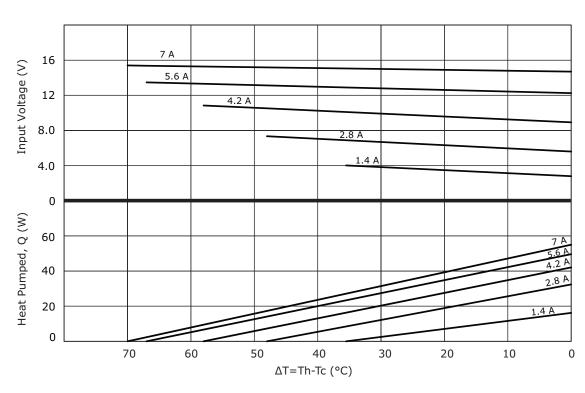
CP70337 PERFORMANCE (Th=27°C)



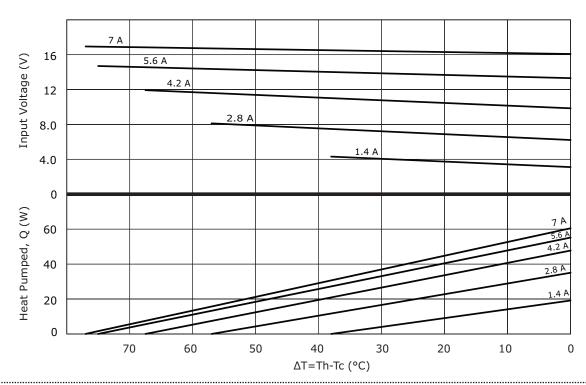
CP70337 PERFORMANCE (Th=50°C)



CP70437 PERFORMANCE (Th=27°C)



CP70437 PERFORMANCE (Th=50°C)



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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

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

CUI DEVICES

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CUI Devices:

CP70137 CP70301537 CP70337 CP70437 CP70237