

SERIES: CP85 | **DESCRIPTION:** 8.5 A PELTIER MODULE

FEATURES

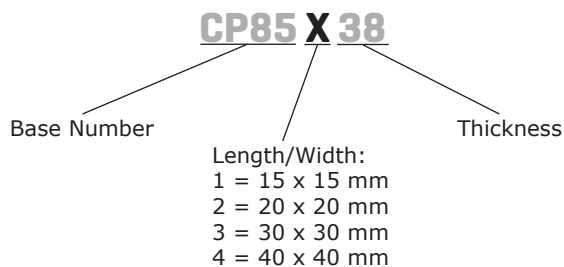
- solid state device
- small and lightweight
- precise temperature control
- quiet operation



MODEL	input voltage max (V)	input current max (A)	output Qmax ¹		output ΔTmax ²	
			T _h =27°C (W)	T _h =50°C (W)	T _h =27°C (°C)	T _h =50°C (°C)
CP85138	2.1	8.5	10.0	11.1	68	75
CP85238	3.8	8.5	18.0	20.1	68	75
CP85338	8.6	8.5	42.0	46.9	68	75
CP85438	15.4	8.5	75.0	83.9	68	75

Notes: 1. maximum cooling capacity at I_{max}, V_{max} and ΔT=0°C
 2. maximum temperature difference at I_{max}, V_{max} and Q=0W (maximum parameters are measured in a vacuum)

PART NUMBER KEY

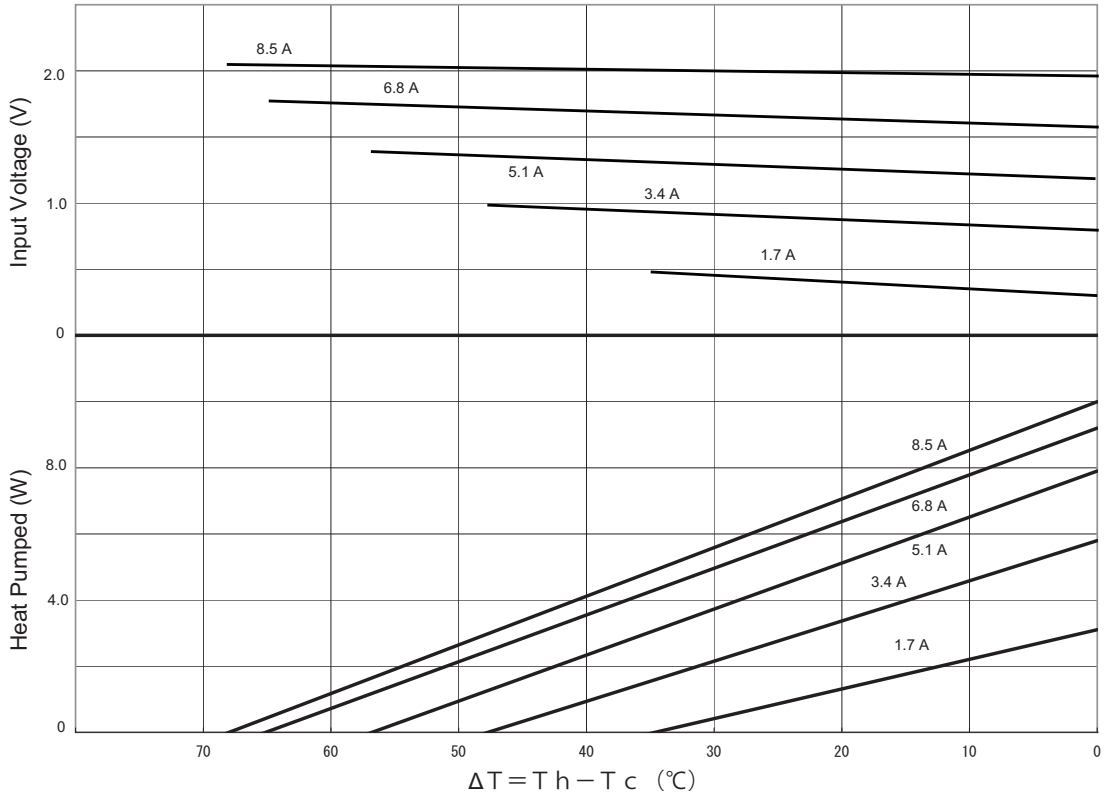


GENERAL

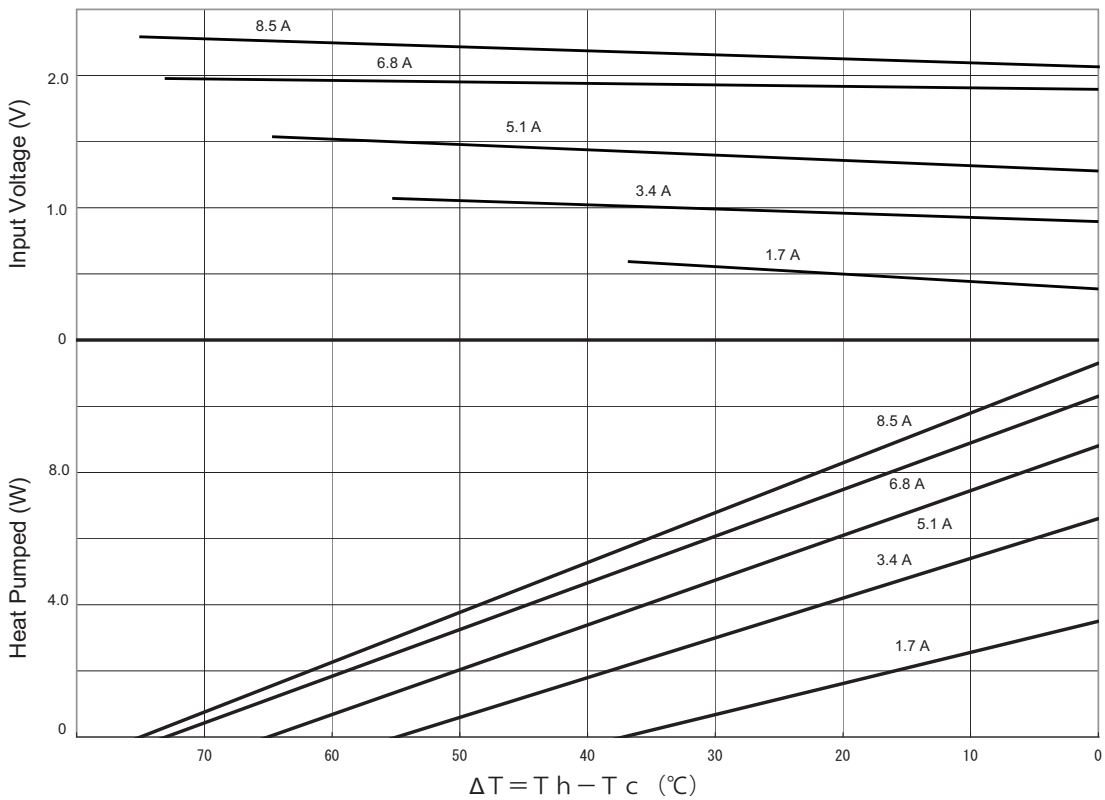
parameter	conditions/description	min	typ	max	units
internal resistance ³	CP85138	0.18	0.20	0.22	Ω
	CP85238	0.36	0.40	0.44	Ω
	CP85338	0.81	0.90	0.99	Ω
	CP85438	1.35	1.5	1.65	Ω
solder melting temperature	connection between thermoelectric pairs			138	°C
assembly compression				98.07	N/cm ²
				10	kgf/cm ²
hot side plate				80	°C
MTBF				200,000	hours

Notes: 3. measured by AC 4-terminal method at 25°C

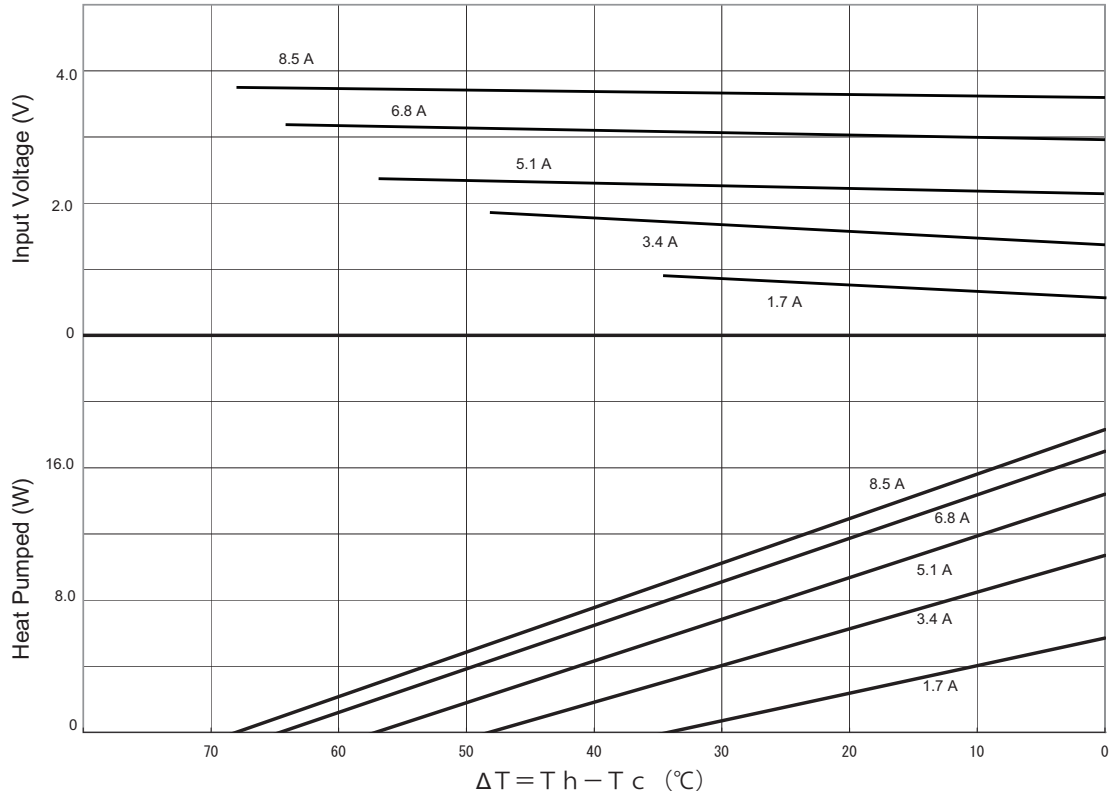
CP85138 PERFORMANCE (Th=27°C)



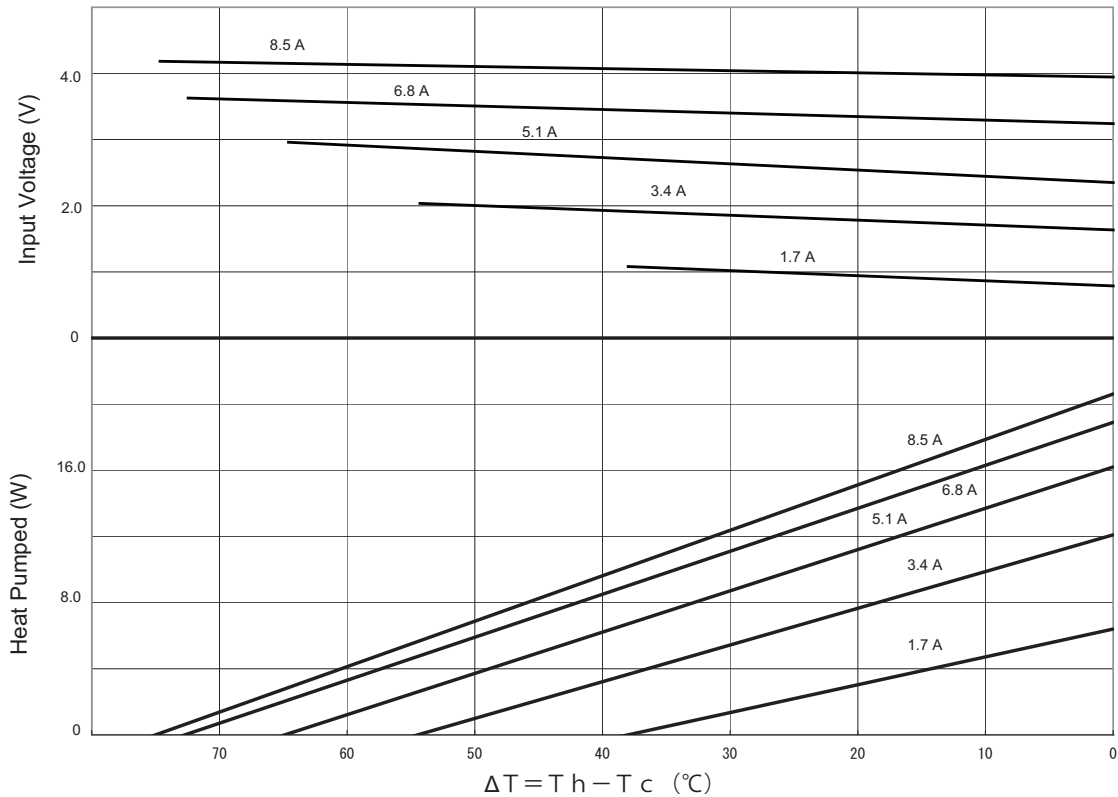
CP85138 PERFORMANCE (Th=50°C)



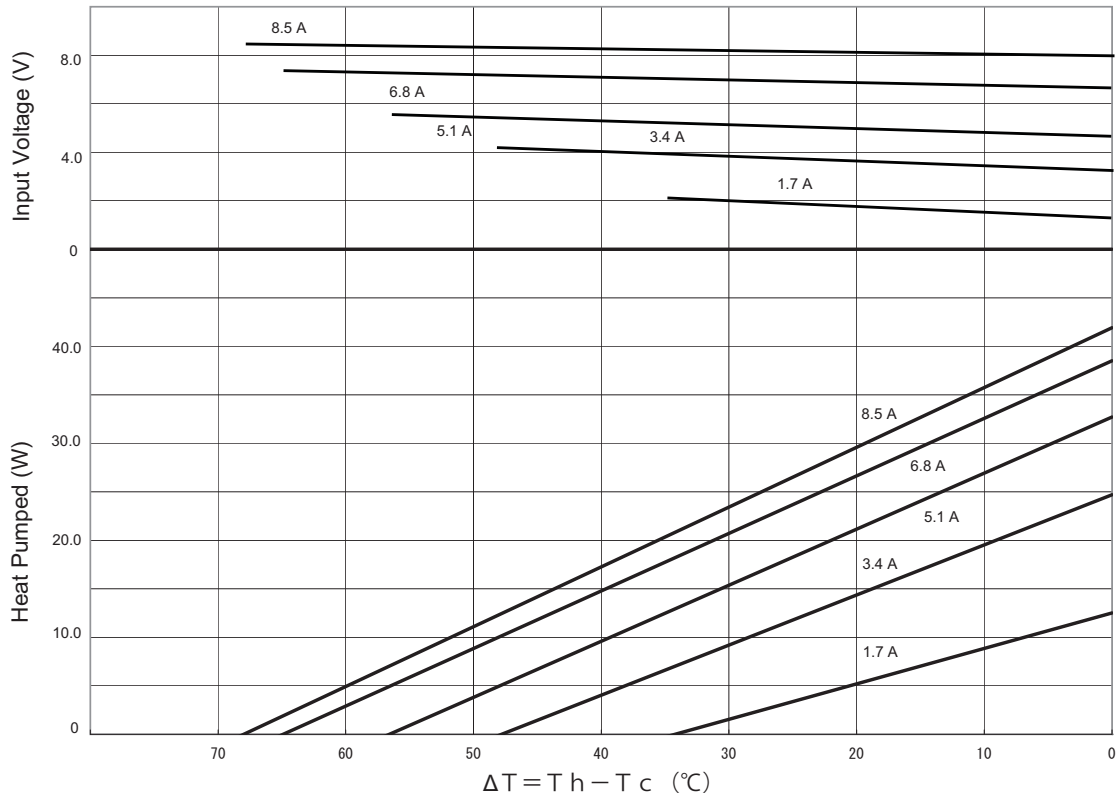
CP85238 PERFORMANCE (Th=27°C)



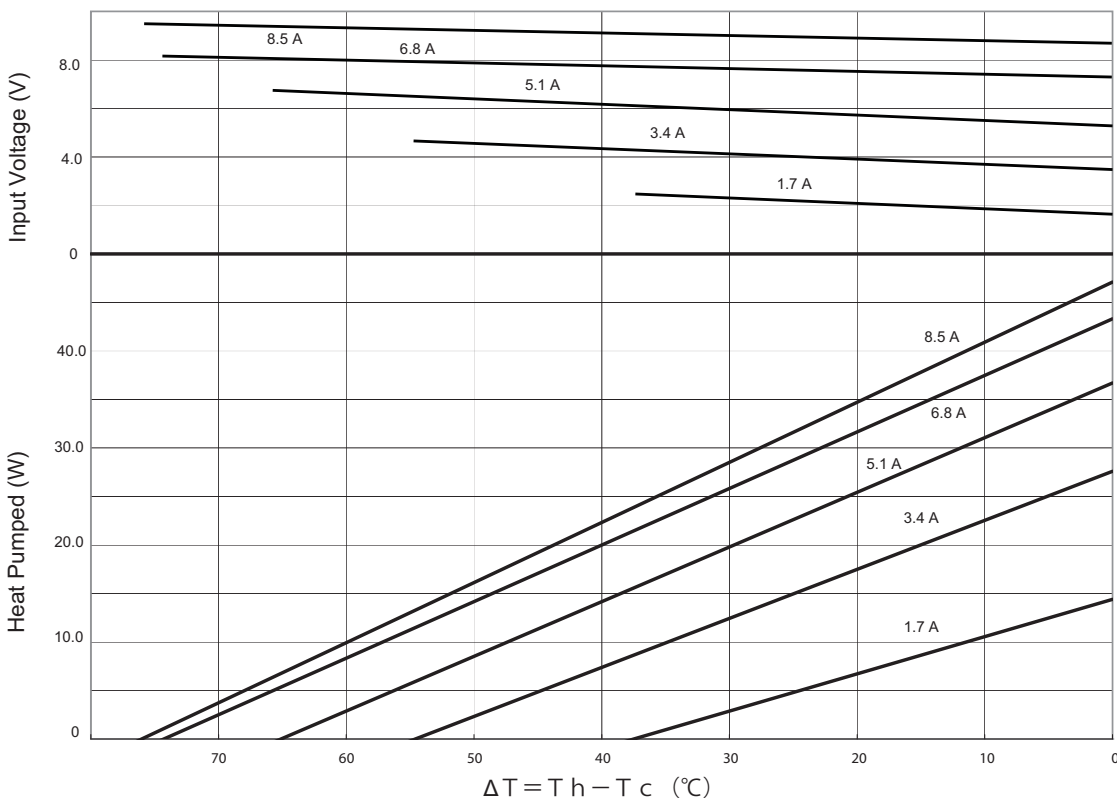
CP85238 PERFORMANCE (Th=50°C)



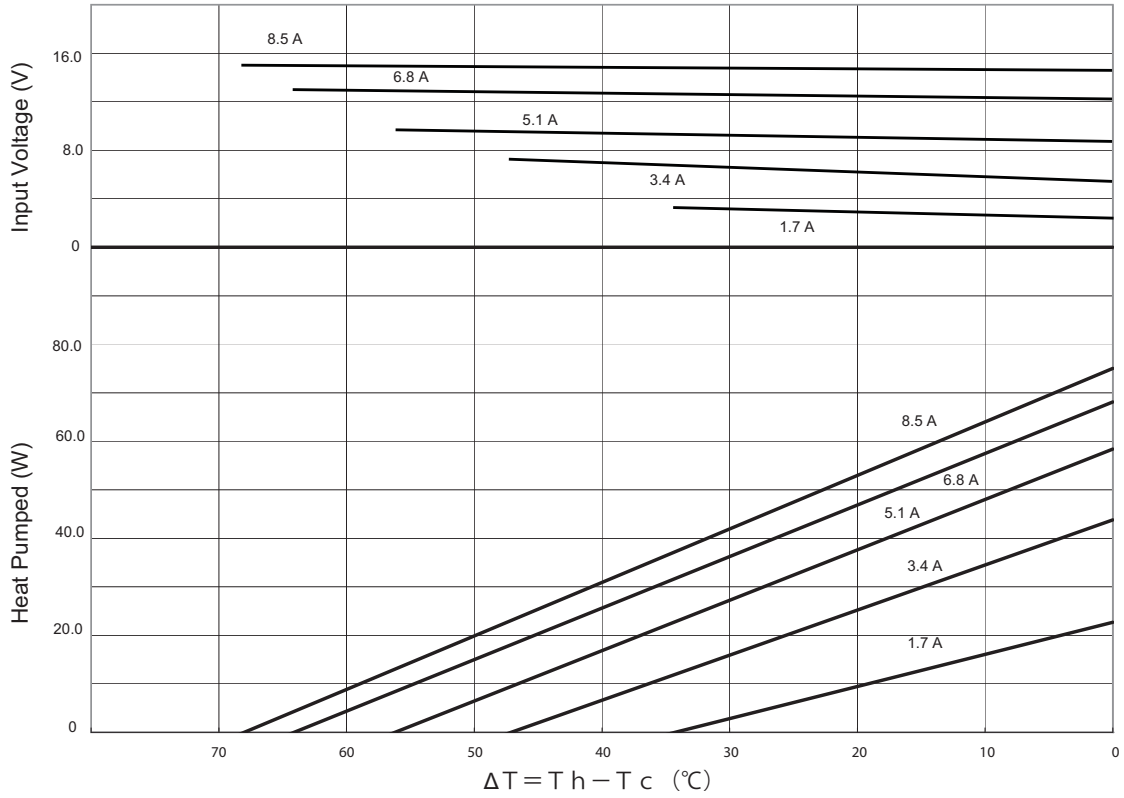
CP85338 PERFORMANCE (Th=27°C)



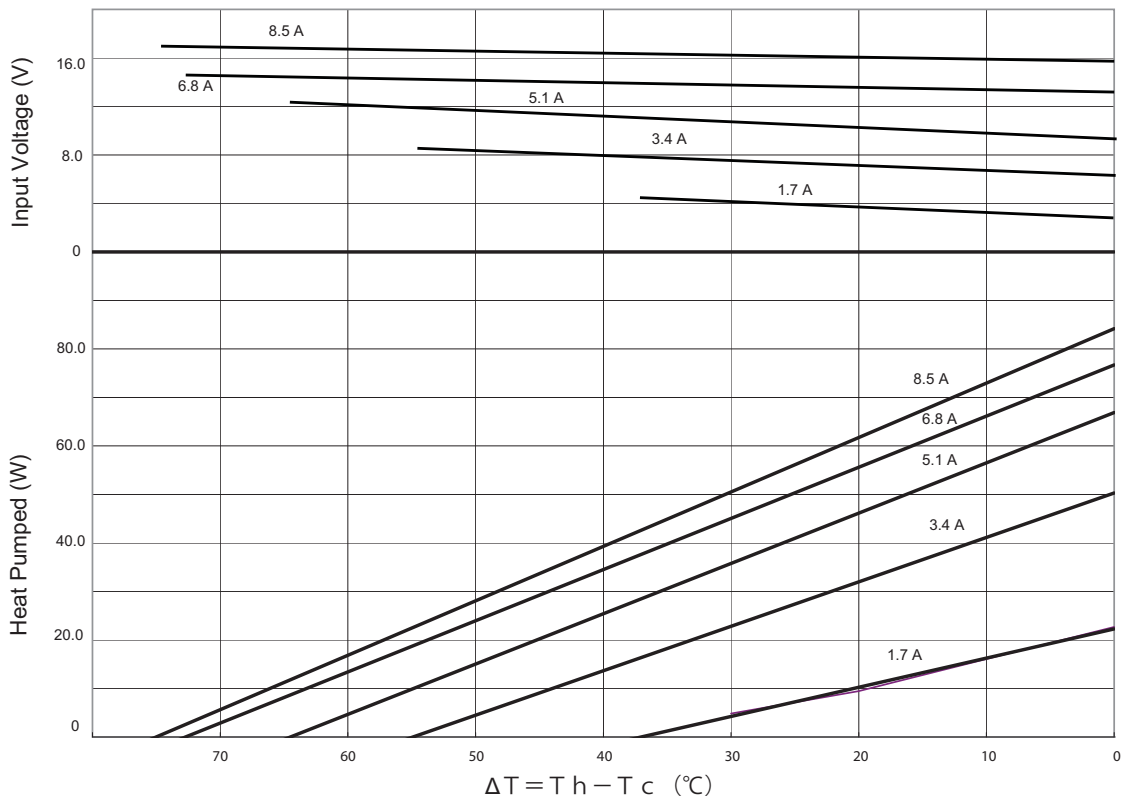
CP85338 PERFORMANCE (Th=50°C)



CP85438 PERFORMANCE (Th=27°C)

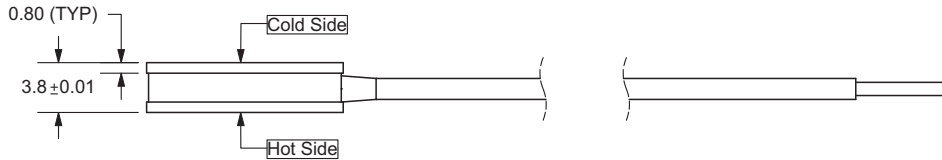


CP85438 PERFORMANCE (Th=50°C)

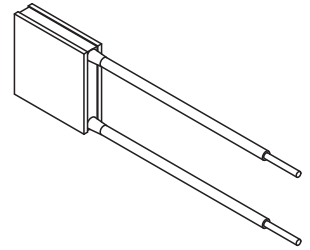
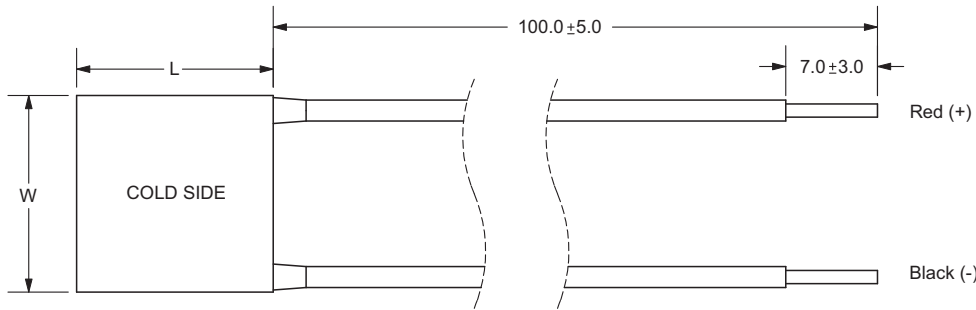


MECHANICAL DRAWING

units: mm



	MATERIAL	PLATING
ceramic plate	Al ₂ O ₃ (Alumina)	
sealer	silicon rubber RTV	
lead wire (CP85338)	UL1430 (20AWG)	tin
lead wire (all other models)	UL1674 (20AWG)	tin
joint cover	silicon rubber RTV	



MODEL	LENGTH x WIDTH (mm)
CP85138	15 x 15 ± 0.3
CP85238	20 x 20 ± 0.3
CP85338	30 x 30 ± 0.3
CP85438	40 x 40 ± 0.3

REVISION HISTORY

rev.	description	date
1.0	initial release	09/03/2009
1.01	applied new template	05/08/2012

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



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