



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

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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**SERIES:** CP20 | **DESCRIPTION:** 2.0 A PELTIER MODULE

**FEATURES**

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

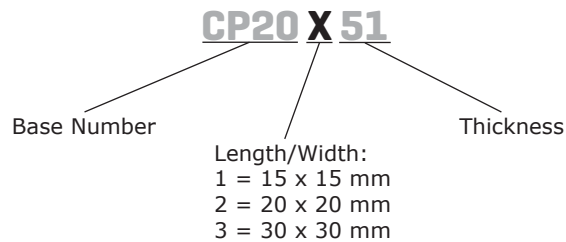


**MODEL**

MODEL	input voltage max (V)	input current max (A)	output Qmax <sup>1</sup>		output ΔTmax <sup>2</sup>	
			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)
CP20151	3.8	2	3.7	4.0	66	72
CP20251	8.6	2	8.5	9.4	66	72
CP20351	15.4	2	15.2	16.9	66	72

Notes: 1. maximum cooling capacity at I<sub>max</sub>, V<sub>max</sub> and ΔT=0°C  
 2. maximum temperature difference at I<sub>max</sub>, V<sub>max</sub> and Q=0W (maximum parameters are measured in a vacuum)

**PART NUMBER KEY**

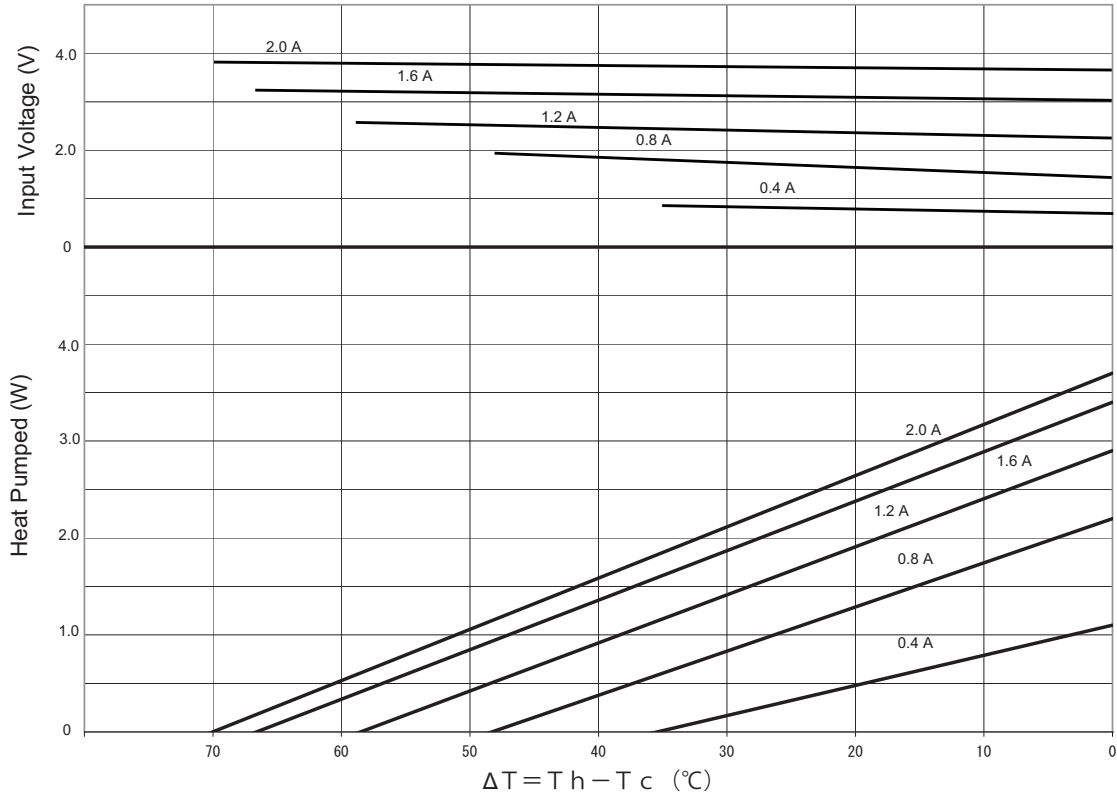


**GENERAL**

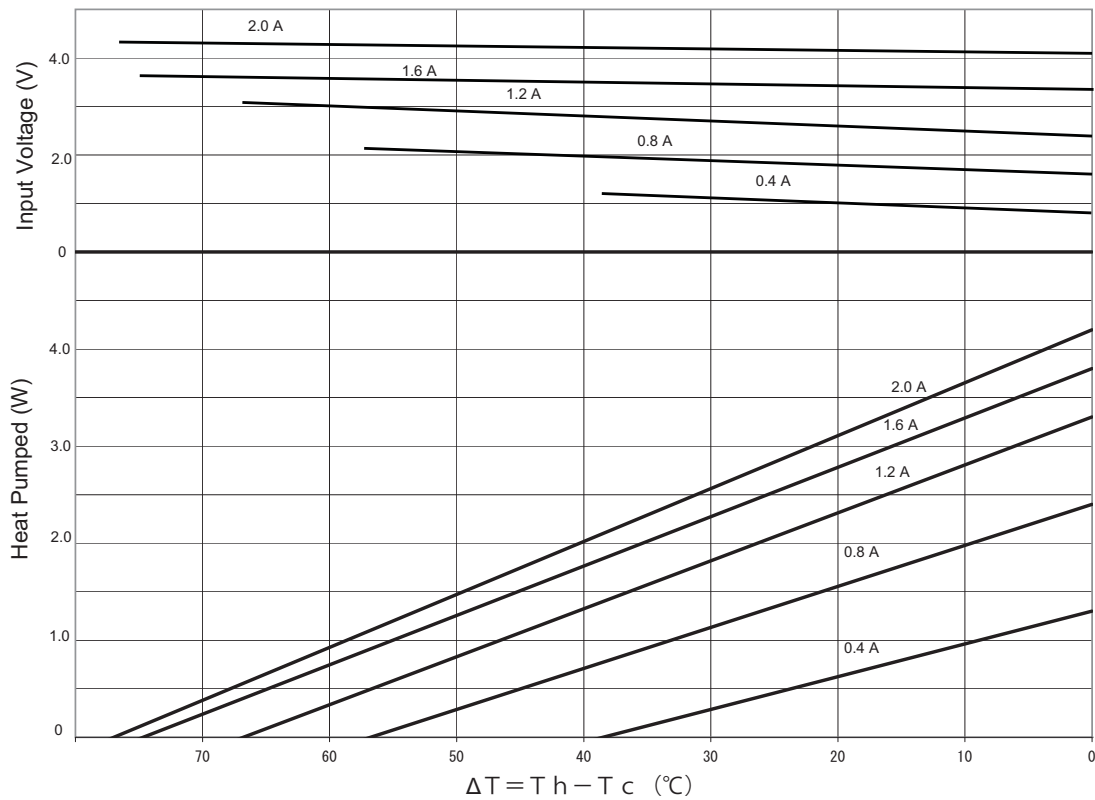
parameter	conditions/description	min	typ	max	units
internal resistance <sup>3</sup>	CP20151	1.44	1.6	1.76	Ω
	CP20251	3.33	3.7	4.07	Ω
	CP20351	6.03	6.7	7.37	Ω
solder melting temperature	connection between thermoelectric pairs			138	°C
assembly compression				98.07	N/cm <sup>2</sup>
				10	kgf/cm <sup>2</sup>
hot side plate				80	°C
MTBF				200,000	hours

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

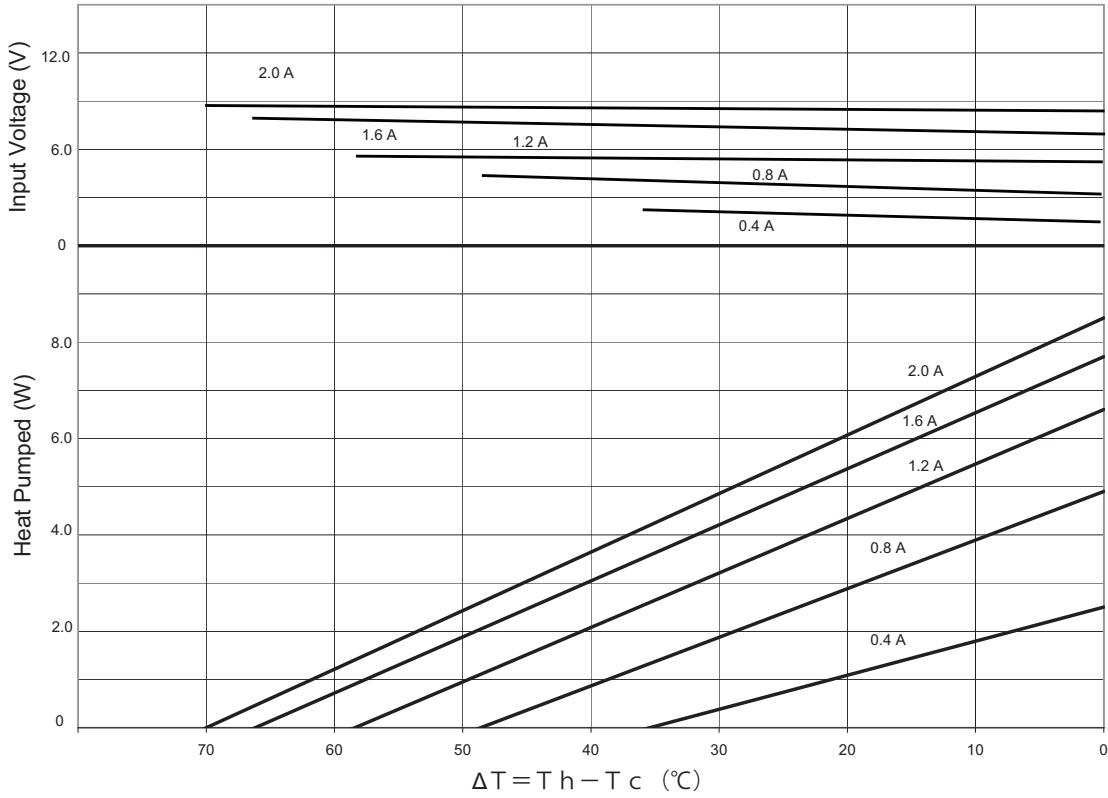
### CP20151 PERFORMANCE (Th=27°C)



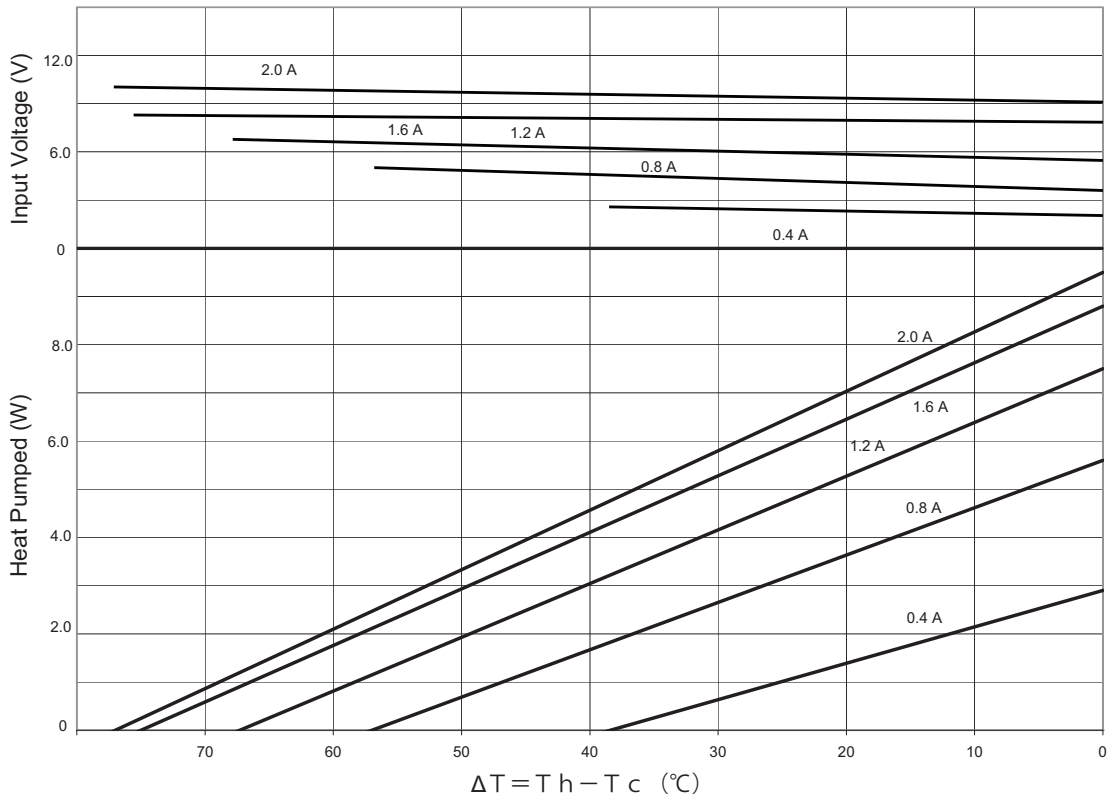
### CP20151 PERFORMANCE (Th=50°C)



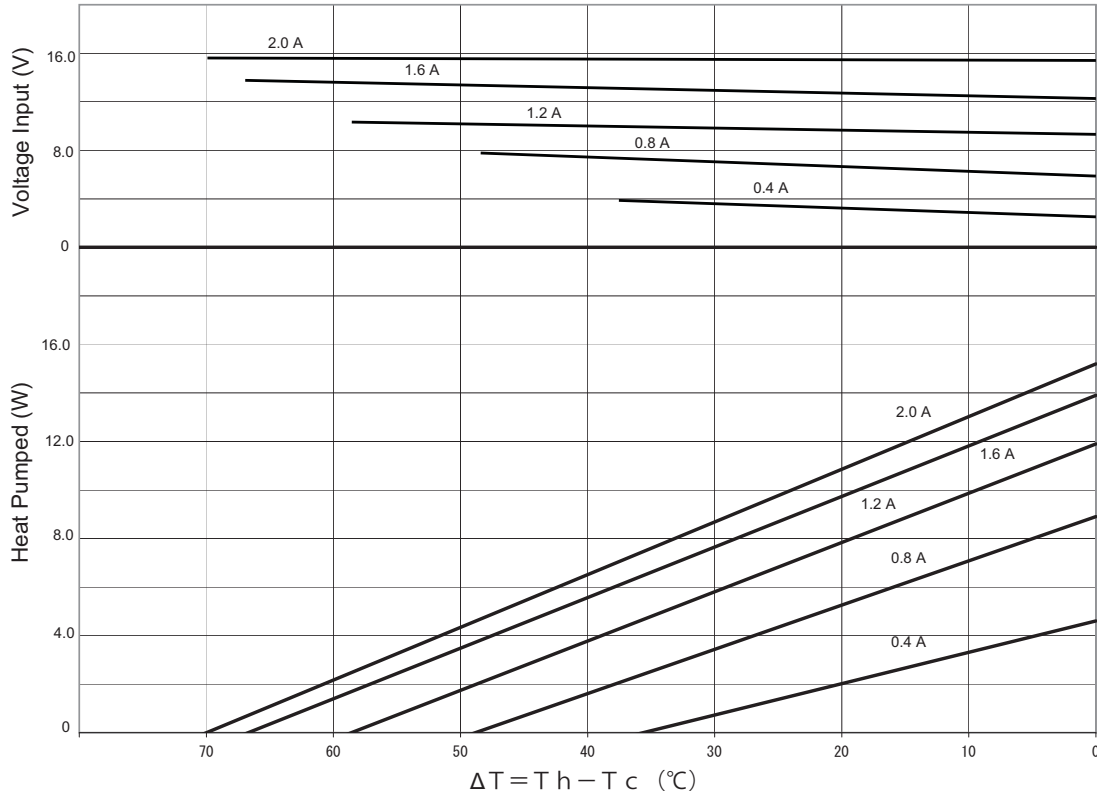
### CP20251 PERFORMANCE (Th=27°C)



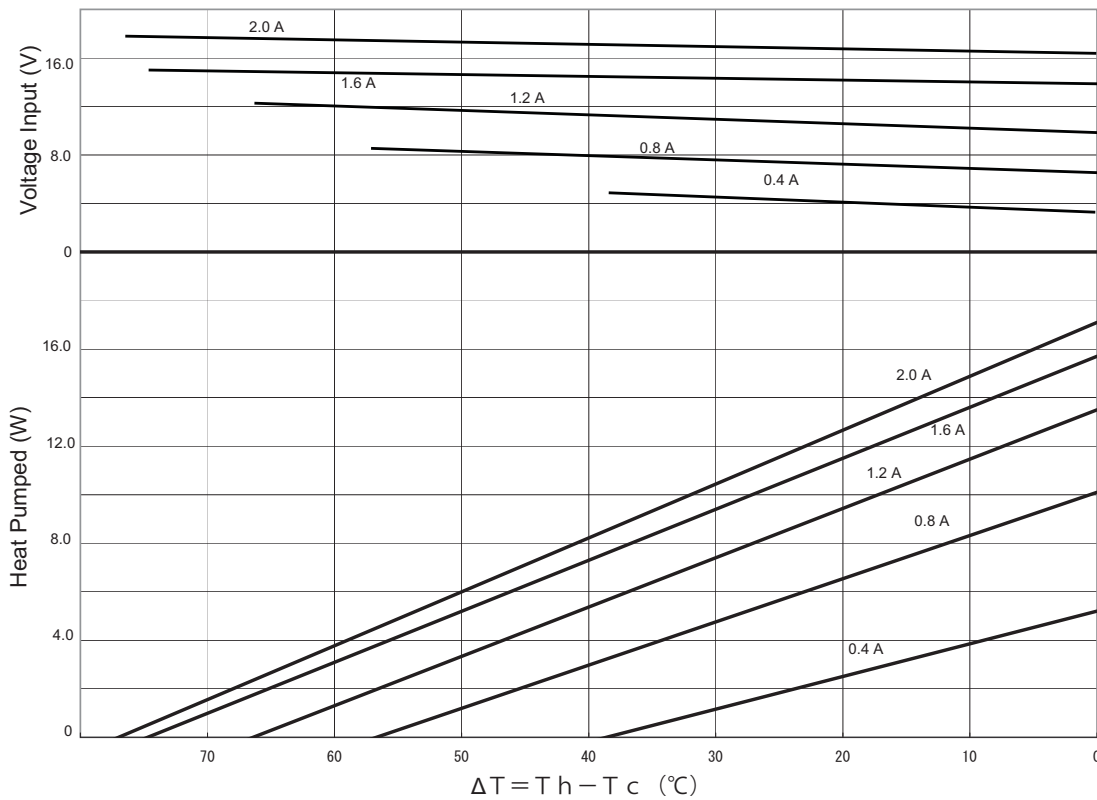
### CP20251 PERFORMANCE (Th=50°C)



### CP20351 PERFORMANCE (Th=27°C)



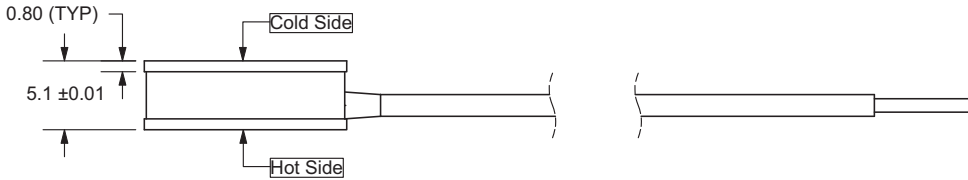
### CP20351 PERFORMANCE (Th=50°C)



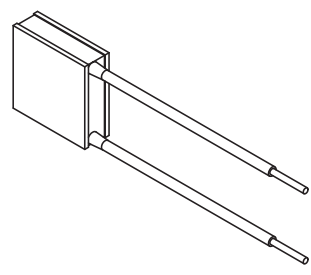
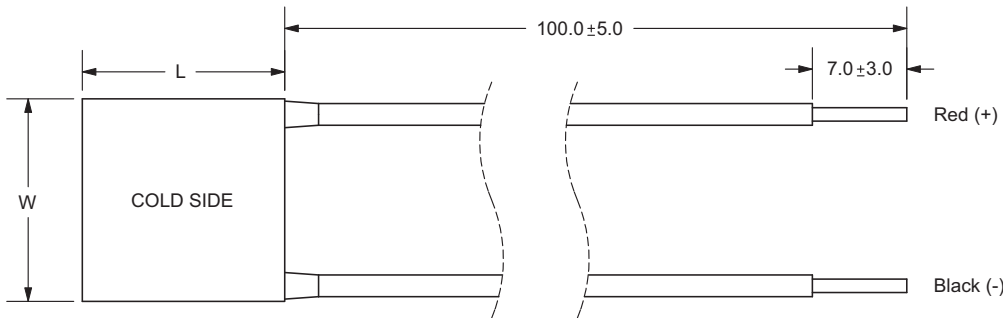


## MECHANICAL DRAWING

units: mm



	MATERIAL	PLATING
ceramic plate	Al <sub>2</sub> O <sub>3</sub> (Alumina)	
sealer	silicon rubber RTV	
lead wire	UL1430 (22AWG)	tin
joint cover	silicon rubber RTV	



MODEL	LENGTH x WIDTH (mm)
CP20151	15 x 15 ± 0.3
CP20251	20 x 20 ± 0.3
CP20351	30 x 30 ± 0.3

## REVISION HISTORY

rev.	description	date
1.0	initial release	09/03/2009
1.01	applied new template	05/07/2012

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



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