



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!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

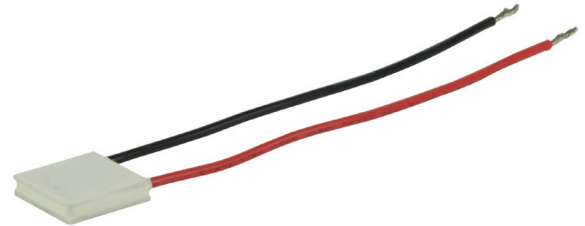
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



**SERIES:** CP85H | **DESCRIPTION:** PELTIER MODULE

**FEATURES**

- arcTEC™ structure
- enhanced reliability for high thermal cycling
- superior thermal performance
- silicon sealed
- wide  $\Delta T$  max
- low profile
- precise temperature control
- solid state construction

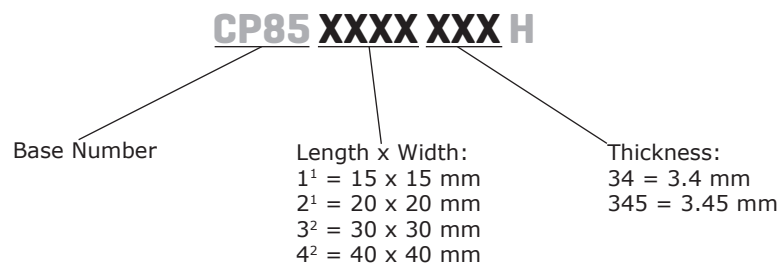


**MODEL**

MODEL	input voltage <sup>1</sup> max (Vdc)	input current <sup>2</sup> max (A)	output Qmax <sup>3</sup>		output $\Delta T$ max <sup>4</sup>	
			T <sub>n</sub> =27°C (W)	T <sub>n</sub> =50°C (W)	T <sub>n</sub> =27°C (°C)	T <sub>n</sub> =50°C (°C)
CP85134H	2.1	8.5	10.3	11.3	70	77
CP85234H	3.8	8.5	18.8	20.8	70	77
CP853345H	8.8	8.5	43.1	48	70	77
CP854345H	15.7	8.5	77.1	85	70	77

- Notes:
1. Maximum voltage at  $\Delta T$  max and T<sub>n</sub>=27°C
  2. Maximum current to achieve  $\Delta T$  max
  3. Maximum heat absorbed at cold side occurs at I<sub>max</sub>, V<sub>max</sub>, and  $\Delta T=0^\circ\text{C}$
  4. Maximum temperature difference occurs at I<sub>max</sub>, V<sub>max</sub>, and Q=0W ( $\Delta T$  max measured in a vacuum at 1.3 Pa)

**PART NUMBER KEY**



- Notes:
1. Only available in 3.4 mm thickness
  2. Only available in 3.45 mm thickness

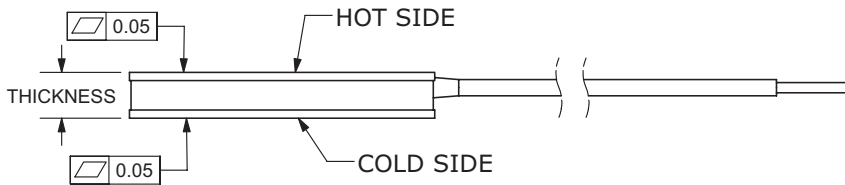
## SPECIFICATIONS

parameter	conditions/description	min	typ	max	units
internal resistance <sup>1</sup>	CP85134H	0.18	0.2	0.22	Ω
	CP85234H	0.315	0.35	0.385	Ω
	CP853345H	0.765	0.85	0.935	Ω
	CP854345H	1.35	1.5	1.65	Ω
solder melting temperature	connection between thermoelectric pairs	235			°C
assembly compression				1	MPa
hot side plate				80	°C
RoHS	2011/65/EU				

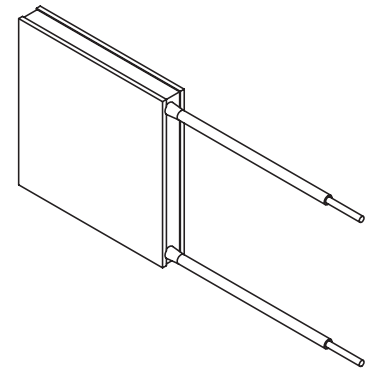
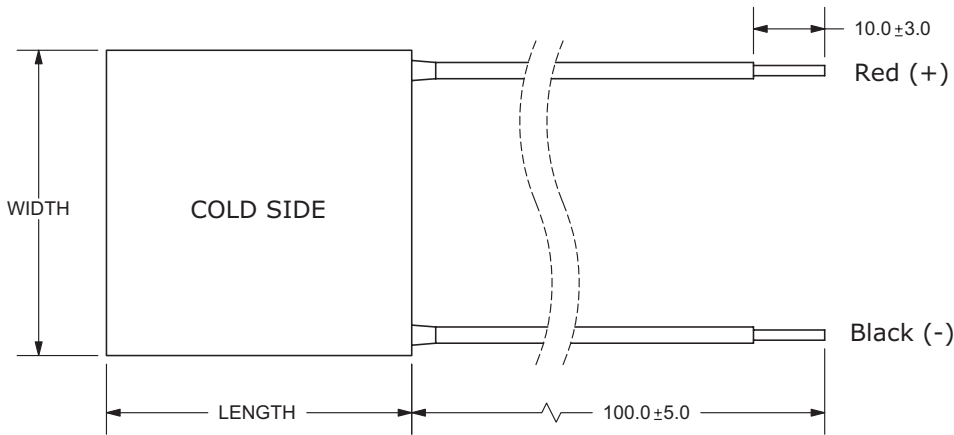
Note: 1. Measured by AC 4-terminal method at 25°C

## MECHANICAL DRAWING

units: mm

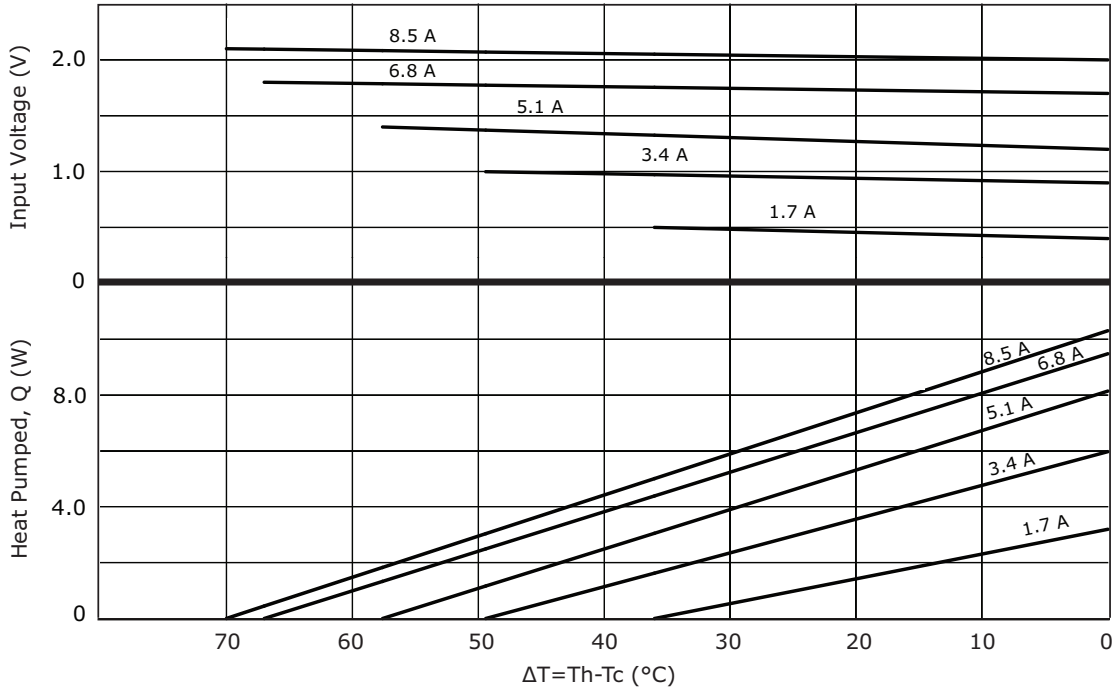


	MATERIAL	PLATING
ceramic plate	96% AL <sub>2</sub> O <sub>3</sub>	
wire leads	20 AWG	tin
sealer	silicon rubber 703 RTV (between cold and hot side plates)	
joint cover	silicon rubber 703 RTV	
marking	P/N & S/N printed on cold side surface	

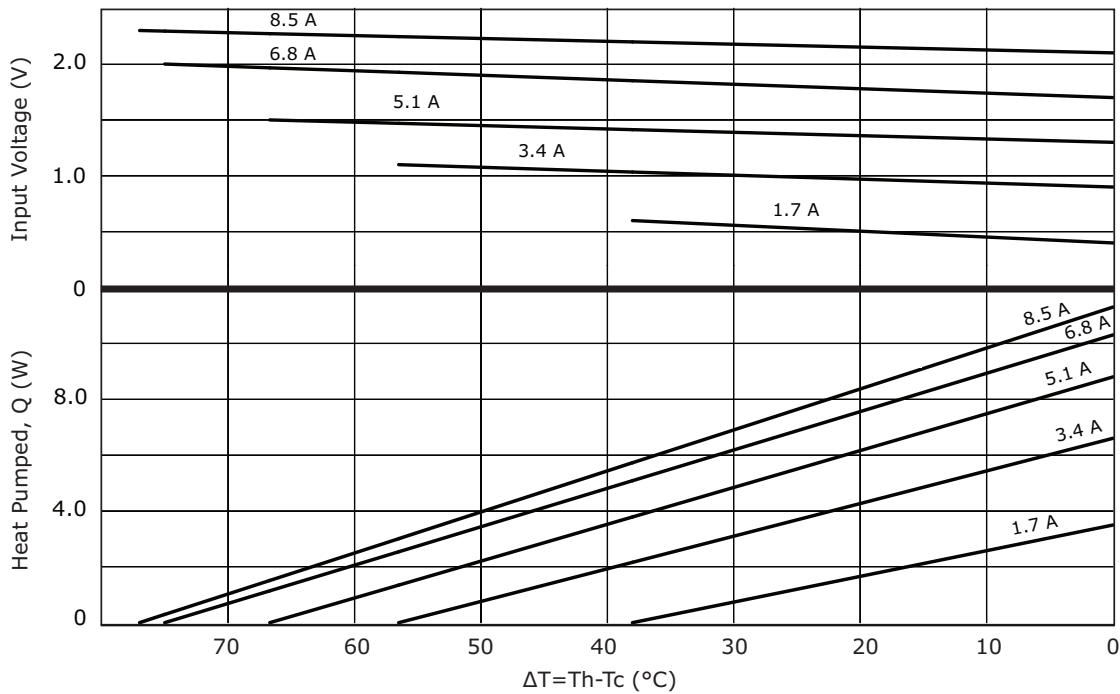


MODEL NO.	LENGTH (mm)	WIDTH (mm)	THICKNESS (mm)
CP85134H	15 ±0.3	15 ±0.3	3.4 ±0.025
CP85234H	20 ±0.3	20 ±0.3	3.4 ±0.025
CP853345H	30 ±0.3	30 ±0.3	3.45 ±0.025
CP854345H	40 ±0.3	40 ±0.3	3.45 ±0.025

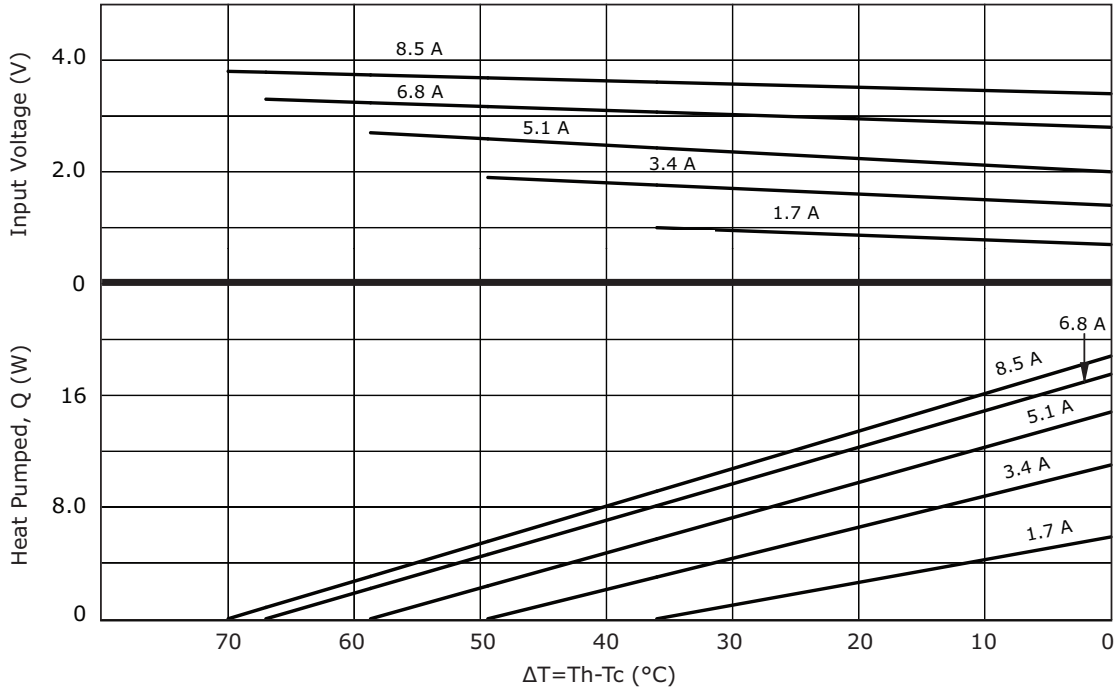
### CP85134H PERFORMANCE (Th=27°C)



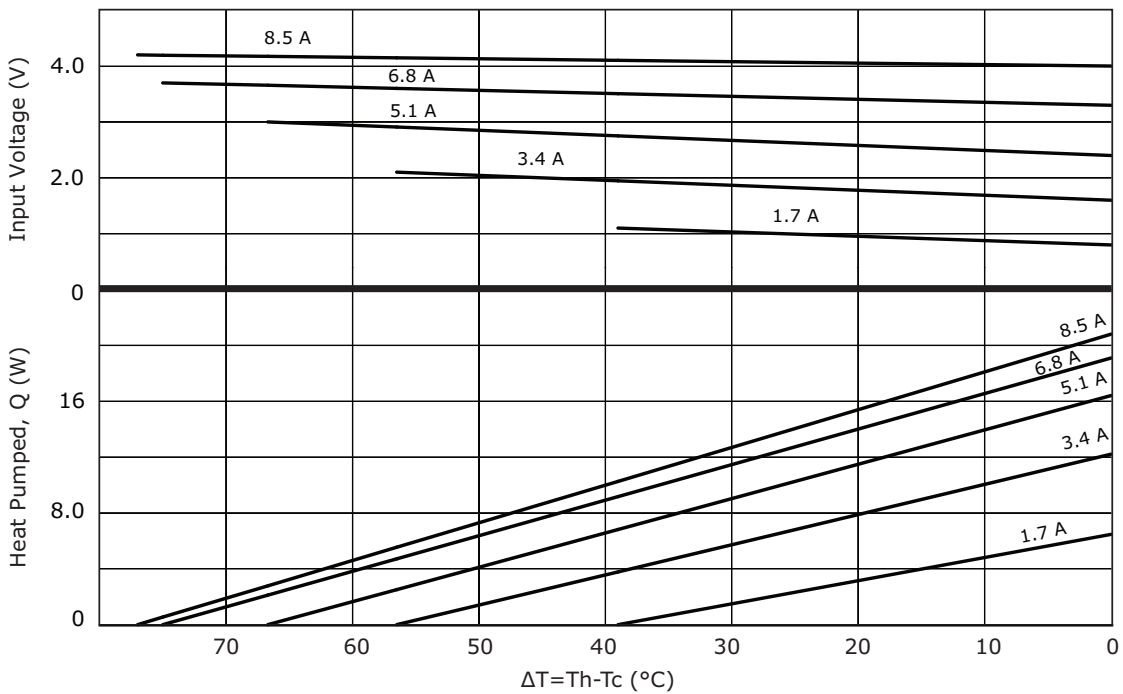
### CP85134H PERFORMANCE (Th=50°C)



### CP85234H PERFORMANCE (Th=27°C)

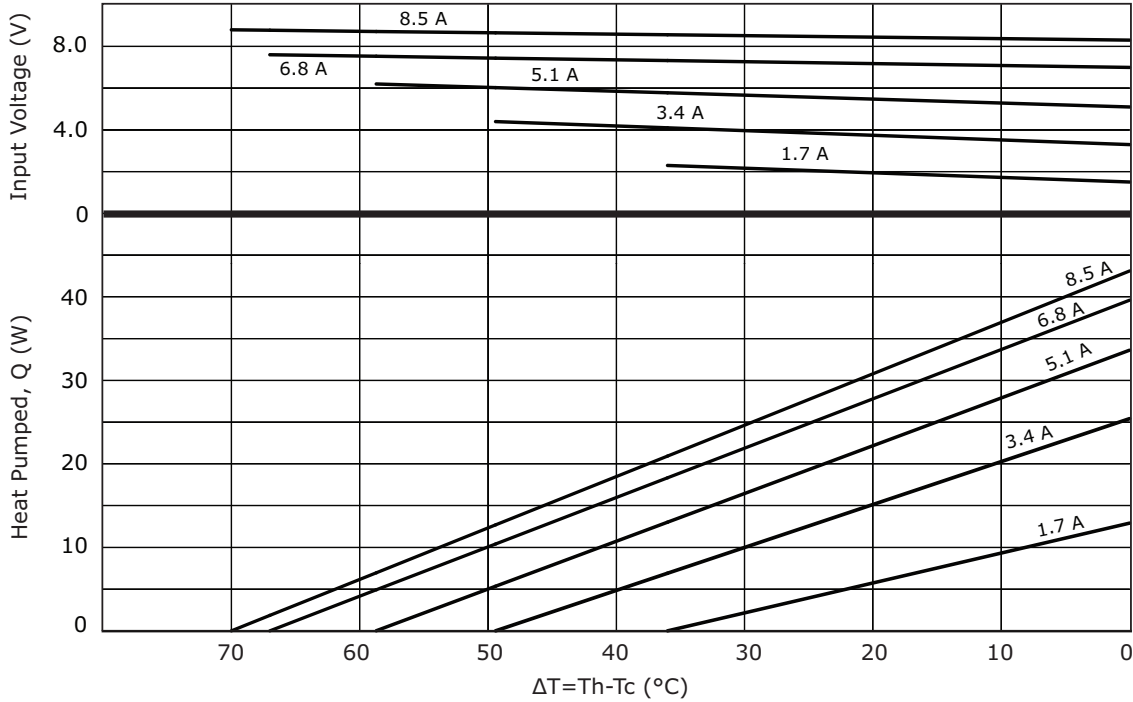


### CP85234H PERFORMANCE (Th=50°C)

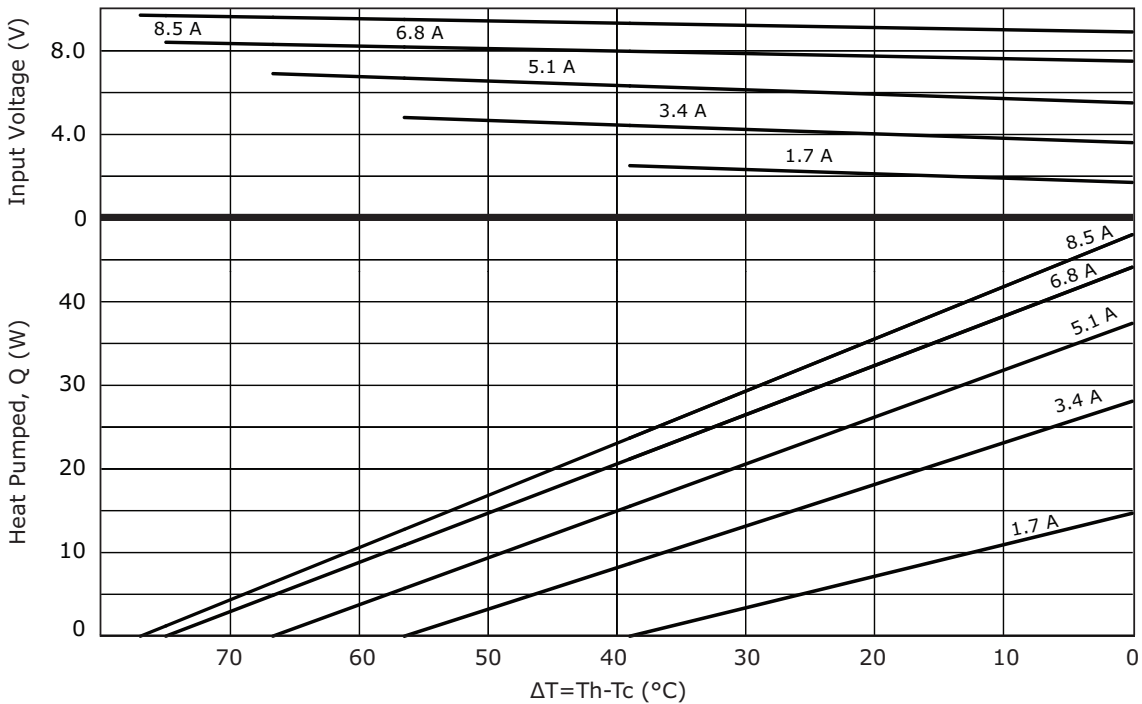




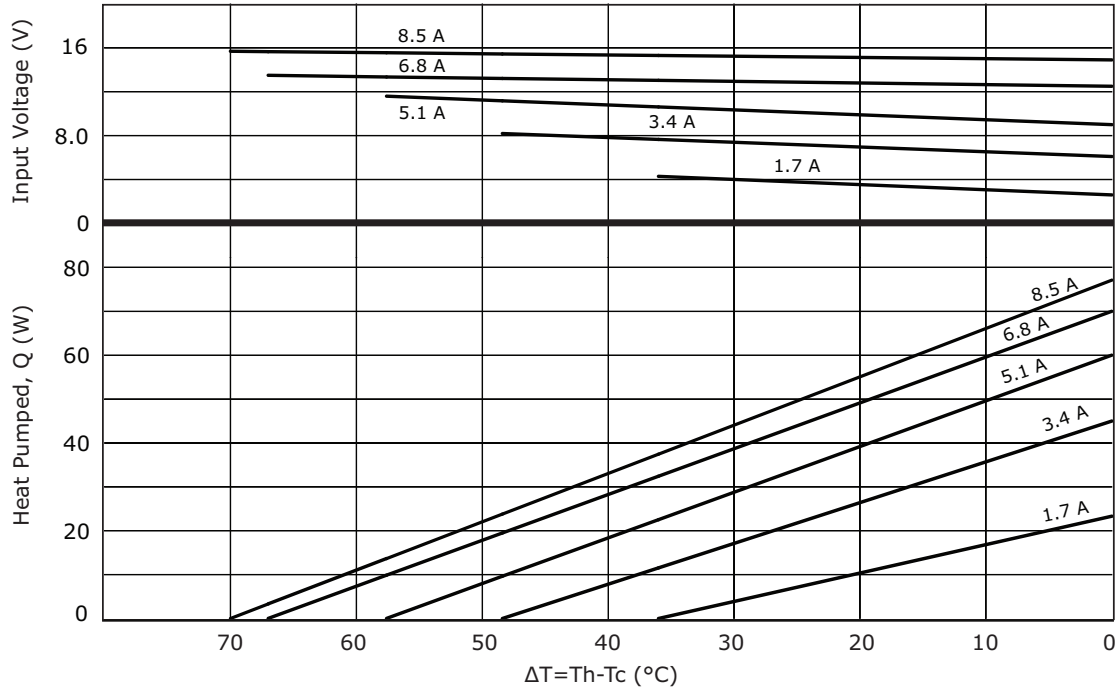
### CP853345H PERFORMANCE (Th=27°C)



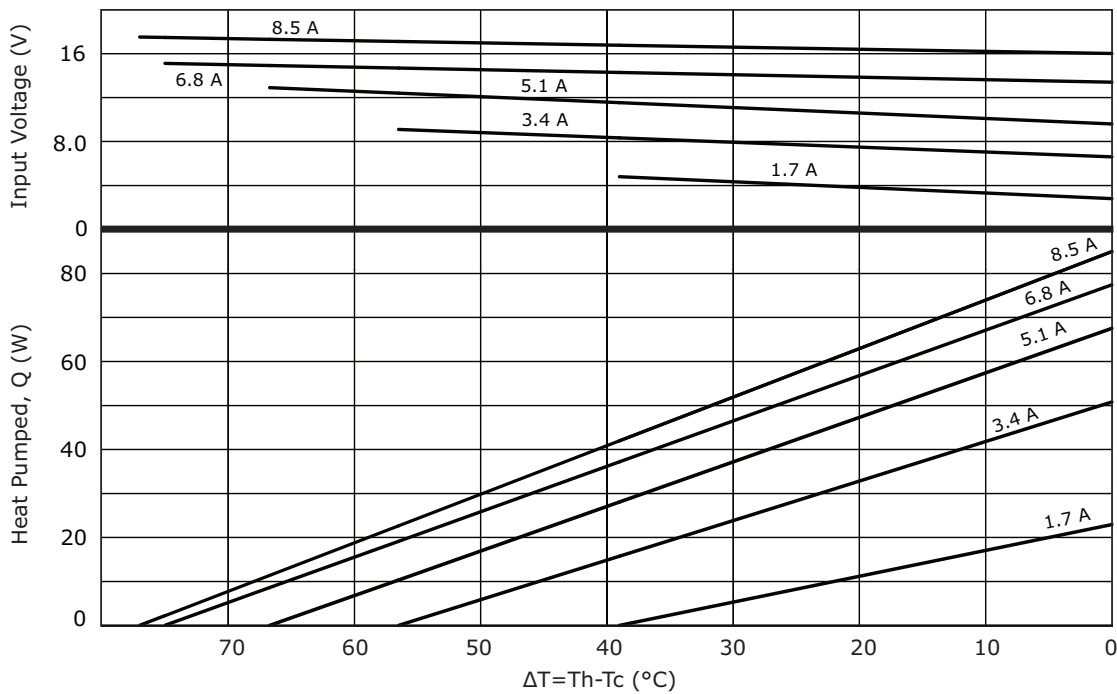
### CP853345H PERFORMANCE (Th=50°C)



### CP854345H PERFORMANCE (Th=27°C)



### CP854345H PERFORMANCE (Th=50°C)



## REVISION HISTORY

rev.	description	date
1.0	initial release	09/08/2016

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



**CUI INC**<sup>®</sup>

**Headquarters**  
20050 SW 112th Ave.  
Tualatin, OR 97062  
**800.275.4899**

Fax 503.612.2383  
**cui.com**  
techsupport@cui.com

CUI offers a one (1) year limited warranty. Complete warranty information is listed on our website.

CUI reserves the right to make changes to the product at any time without notice. Information provided by CUI is believed to be accurate and reliable. However, no responsibility is assumed by CUI for its use, nor for any infringements of patents or other rights of third parties which may result from its use.

CUI products are not authorized or warranted for use as critical components in equipment that requires an extremely high level of reliability. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.