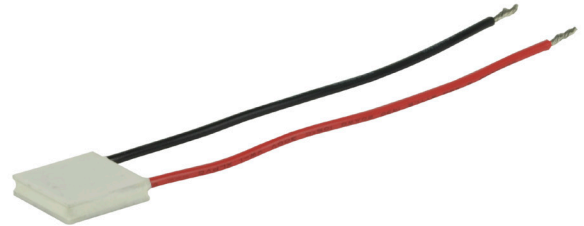


**SERIES:** CP85H | **DESCRIPTION:** PELTIER MODULE

**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

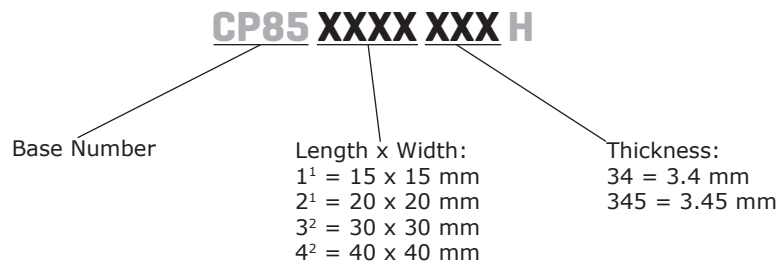


**MODEL**

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

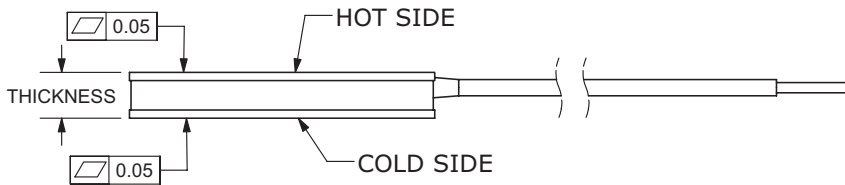
## SPECIFICATIONS

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				

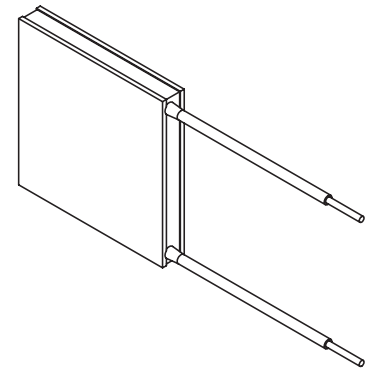
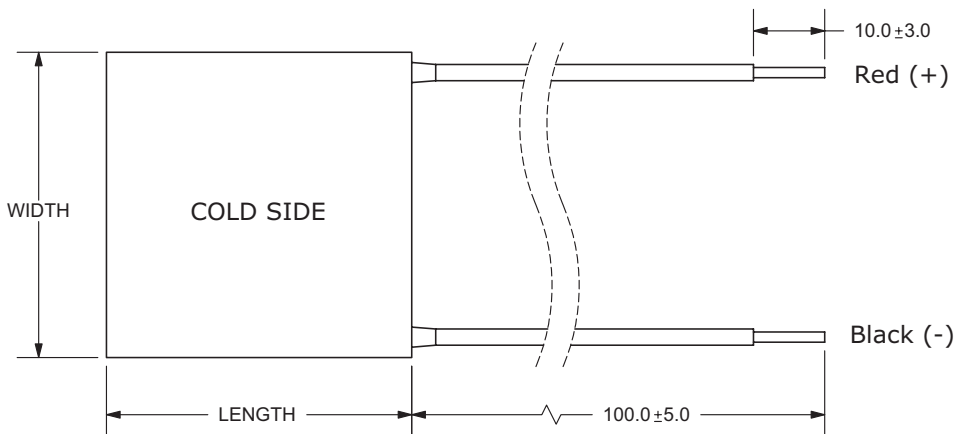
Note: 1. Measured by AC 4-terminal method at 25°C

## MECHANICAL DRAWING

units: mm

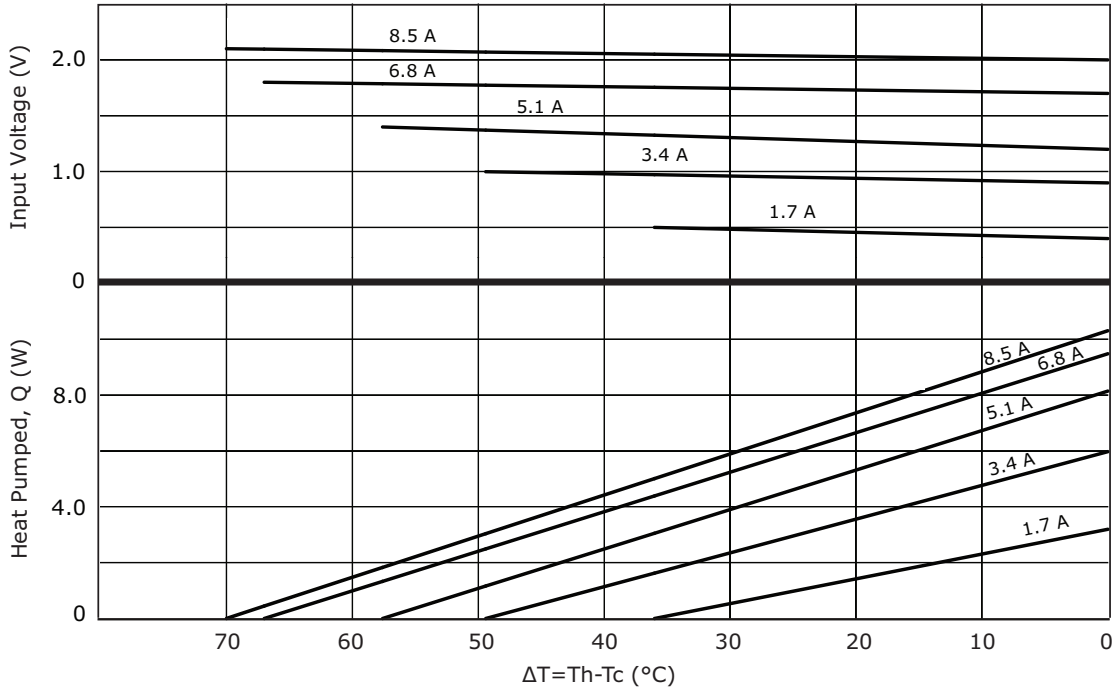


	MATERIAL	PLATING
ceramic plate	96% AL <sub>2</sub> O <sub>3</sub>	
wire leads	20 AWG	tin
sealer	silicon rubber 703 RTV (between cold and hot side plates)	
joint cover	silicon rubber 703 RTV	
marking	P/N & S/N printed on cold side surface	

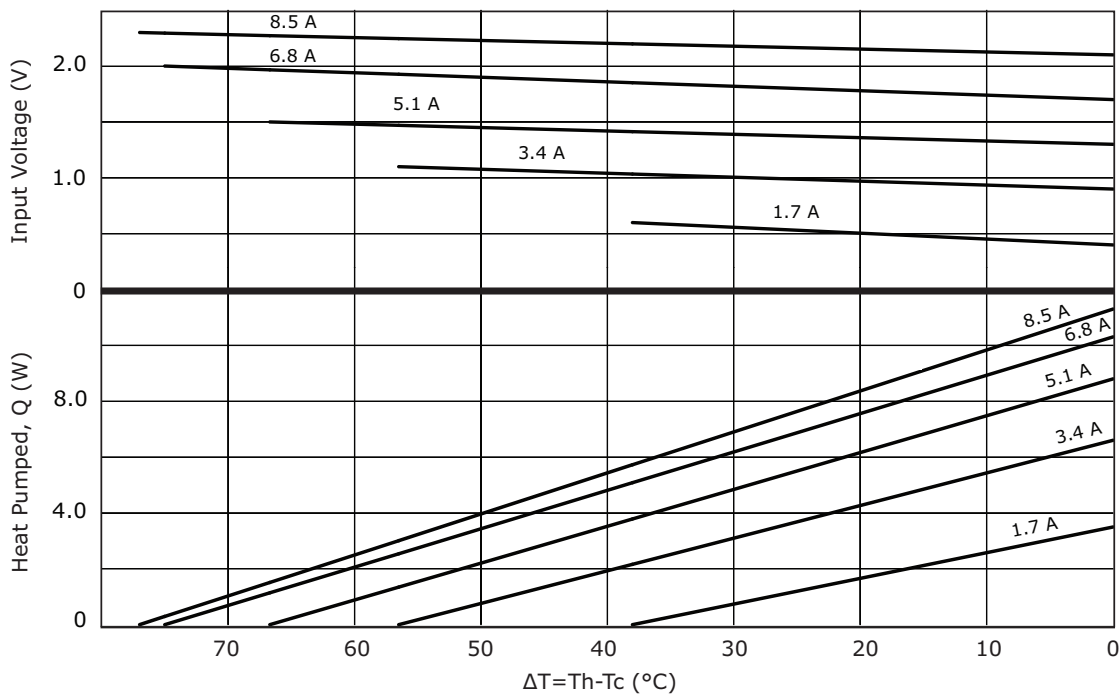


MODEL NO.	LENGTH (mm)	WIDTH (mm)	THICKNESS (mm)
CP85134H	15 ±0.3	15 ±0.3	3.4 ±0.025
CP85234H	20 ±0.3	20 ±0.3	3.4 ±0.025
CP853345H	30 ±0.3	30 ±0.3	3.45 ±0.025
CP854345H	40 ±0.3	40 ±0.3	3.45 ±0.025

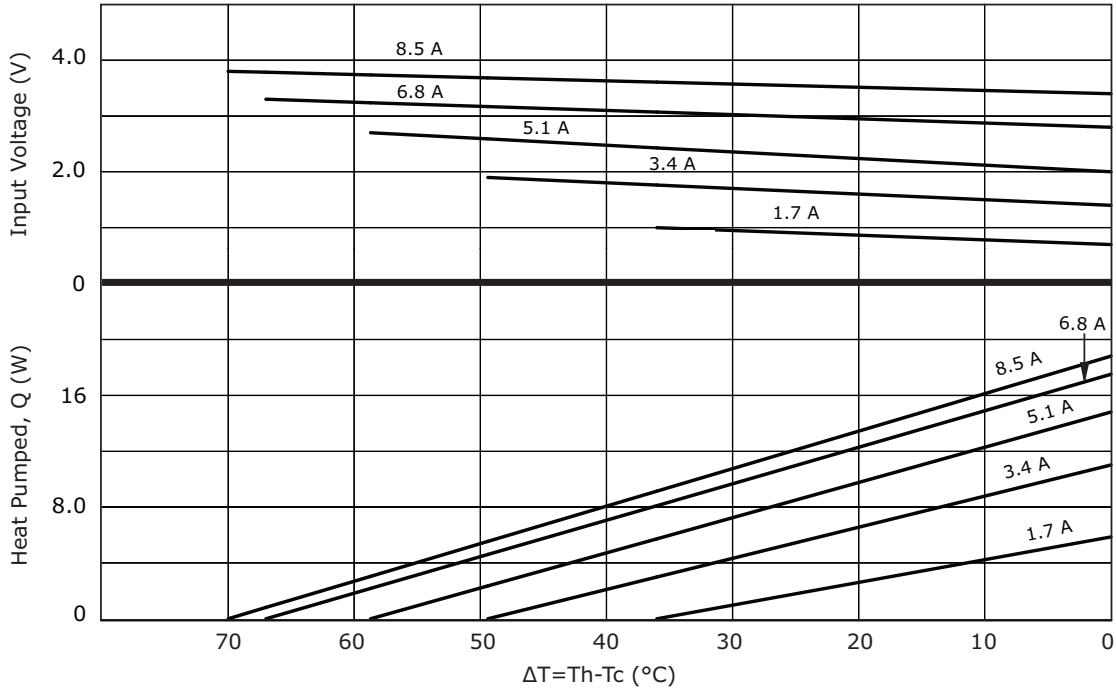
### CP85134H PERFORMANCE (Th=27°C)



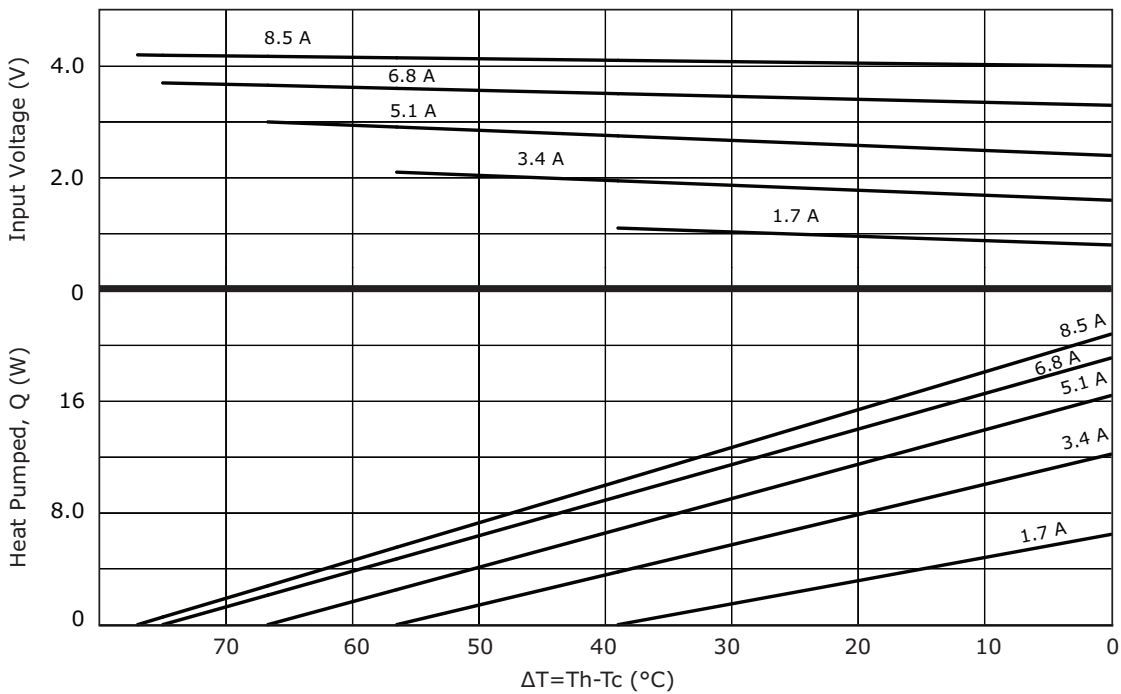
### CP85134H PERFORMANCE (Th=50°C)



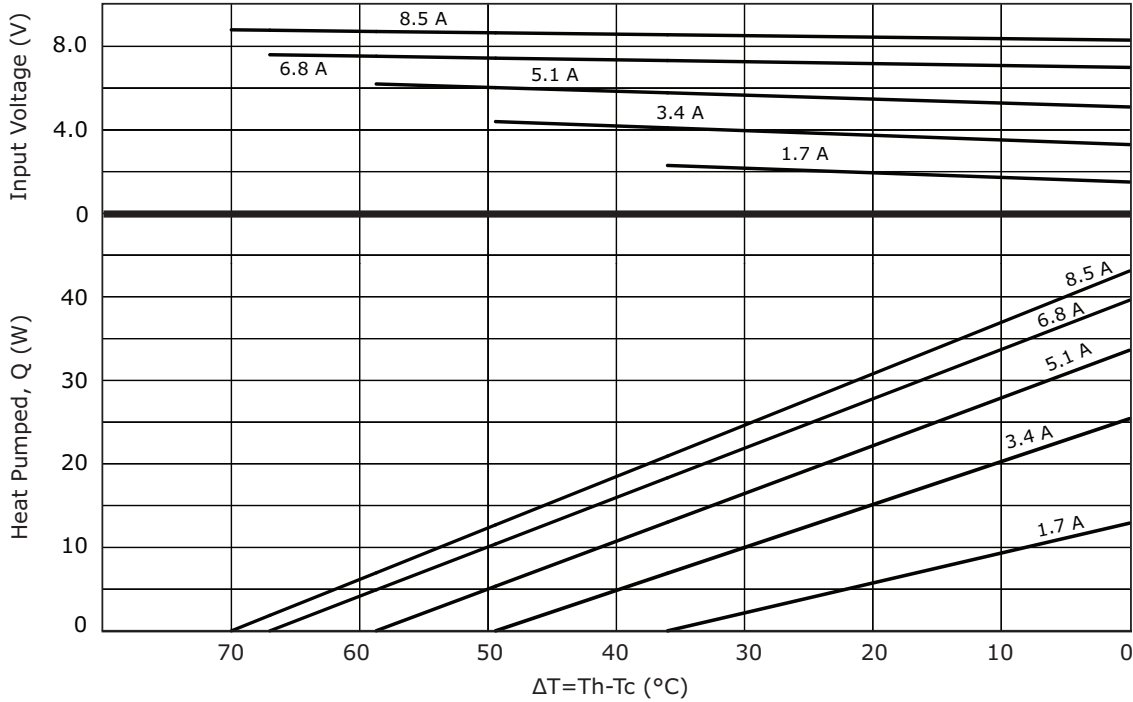
### CP85234H PERFORMANCE (Th=27°C)



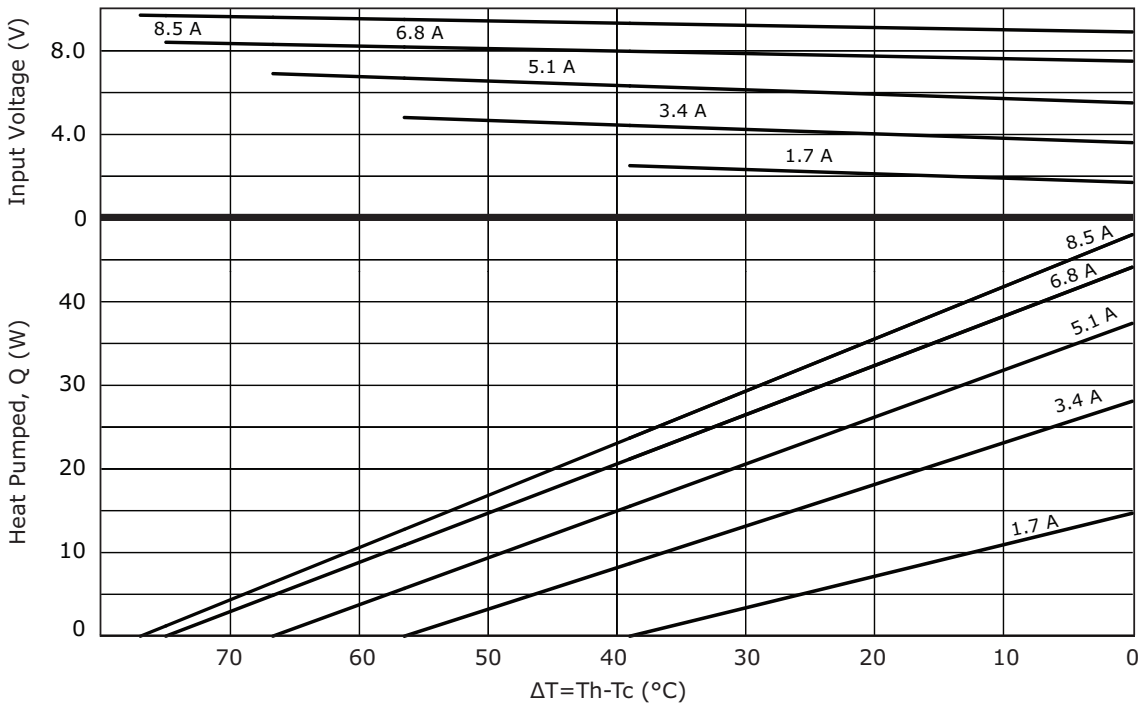
### CP85234H PERFORMANCE (Th=50°C)



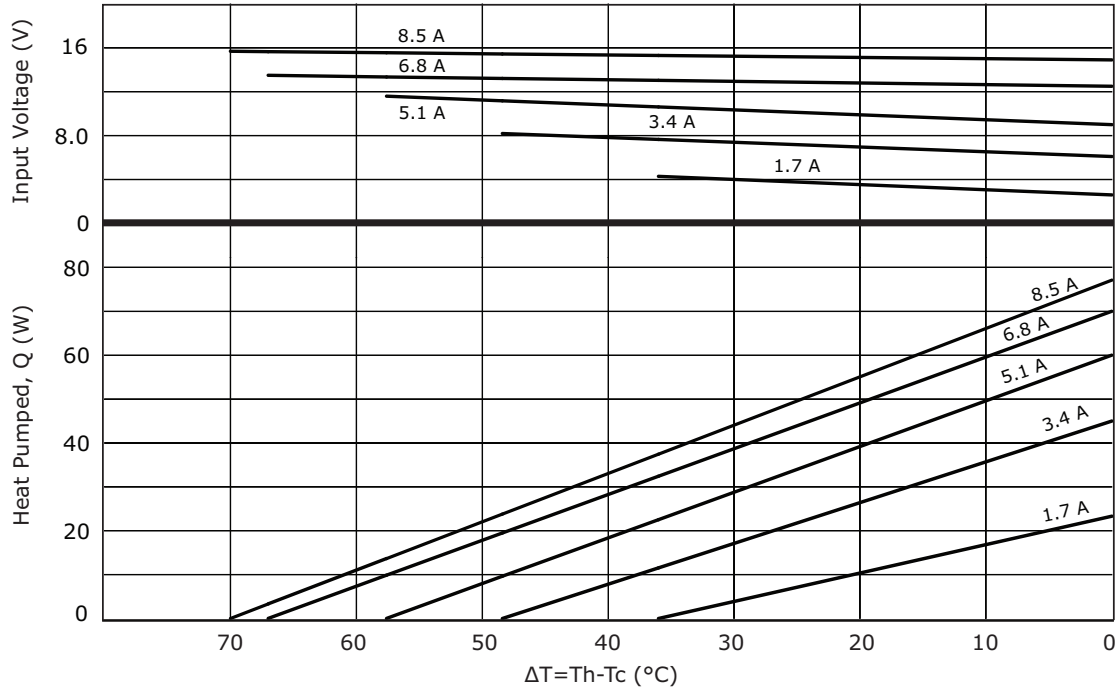
### CP853345H PERFORMANCE (Th=27°C)



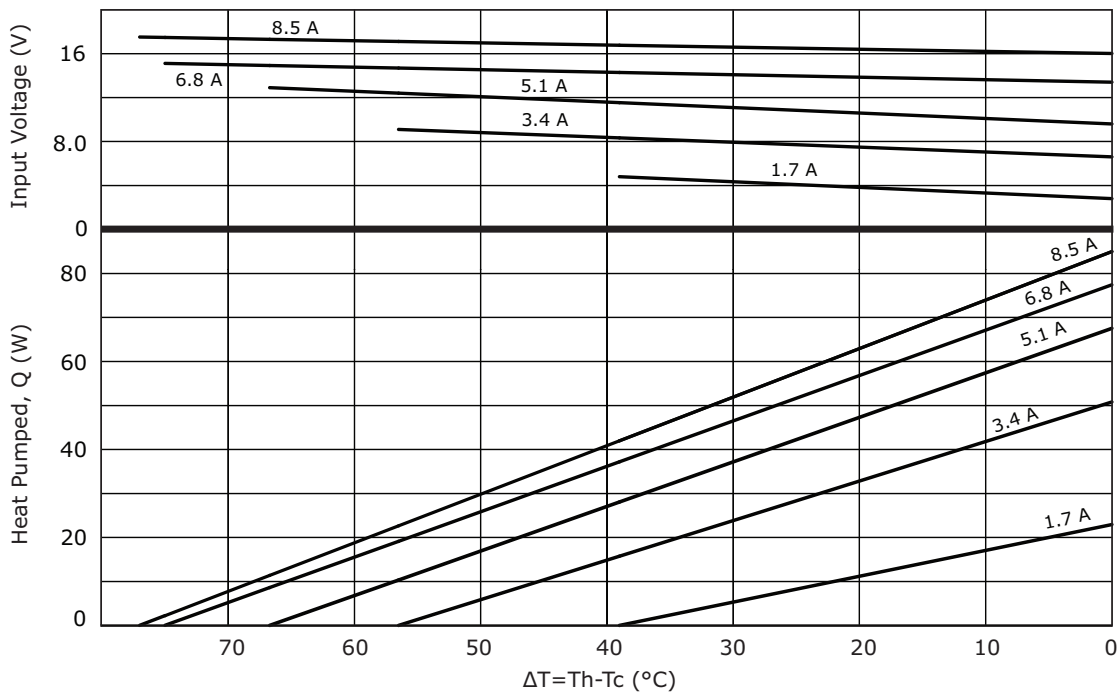
### CP853345H PERFORMANCE (Th=50°C)



### CP854345H PERFORMANCE (Th=27°C)



### CP854345H PERFORMANCE (Th=50°C)



## REVISION HISTORY

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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.



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

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

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