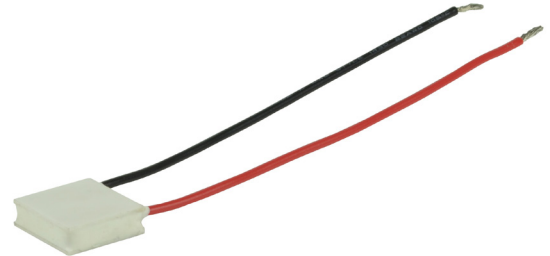


**SERIES:** CP20H | **DESCRIPTION:** PELTIER MODULE

**FEATURES**

- solid state device
- high performance cooler
- precise temperature control
- quiet operation

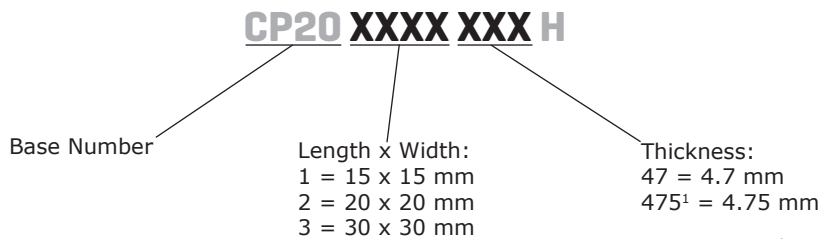


**MODEL**

MODEL	input voltage <sup>1</sup> max (Vdc)	input current <sup>2</sup> max (A)	output Qmax <sup>3</sup>		output ΔTmax <sup>4</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)
CP20147H	3.8	2.0	4.4	5.0	70	77
CP20247H	8.8	2.0	10.2	11.2	70	77
CP203475H	15.7	2.0	18.2	19.5	70	77

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

**PART NUMBER KEY**



- Notes:
1. Only available in 30 x 30 mm size

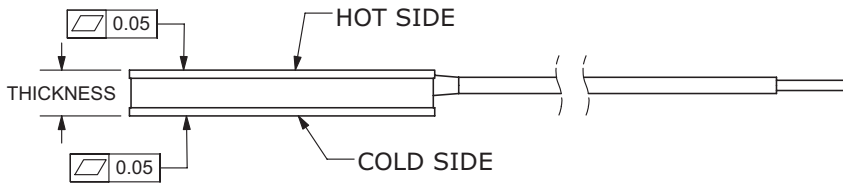
## SPECIFICATIONS

parameter	conditions/description	min	typ	max	units
internal resistance <sup>1</sup>	CP20147H	1.485	1.65	1.815	Ω
	CP20247H	3.33	3.7	4.07	Ω
	CP203475H	6.03	6.7	7.37	Ω
solder melting temperature	connection between thermoelectric pairs	235			°C
assembly compression				1	MPa
hot side plate				80	°C
RoHS	2011/65/EU				

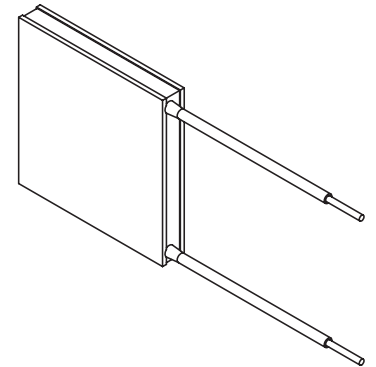
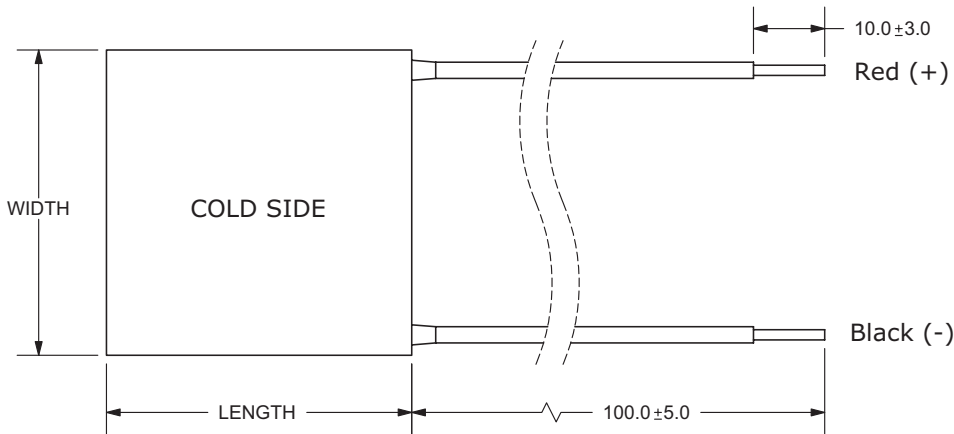
Note: 1. Measured by AC 4-terminal method at 25°C

## MECHANICAL DRAWING

units: mm

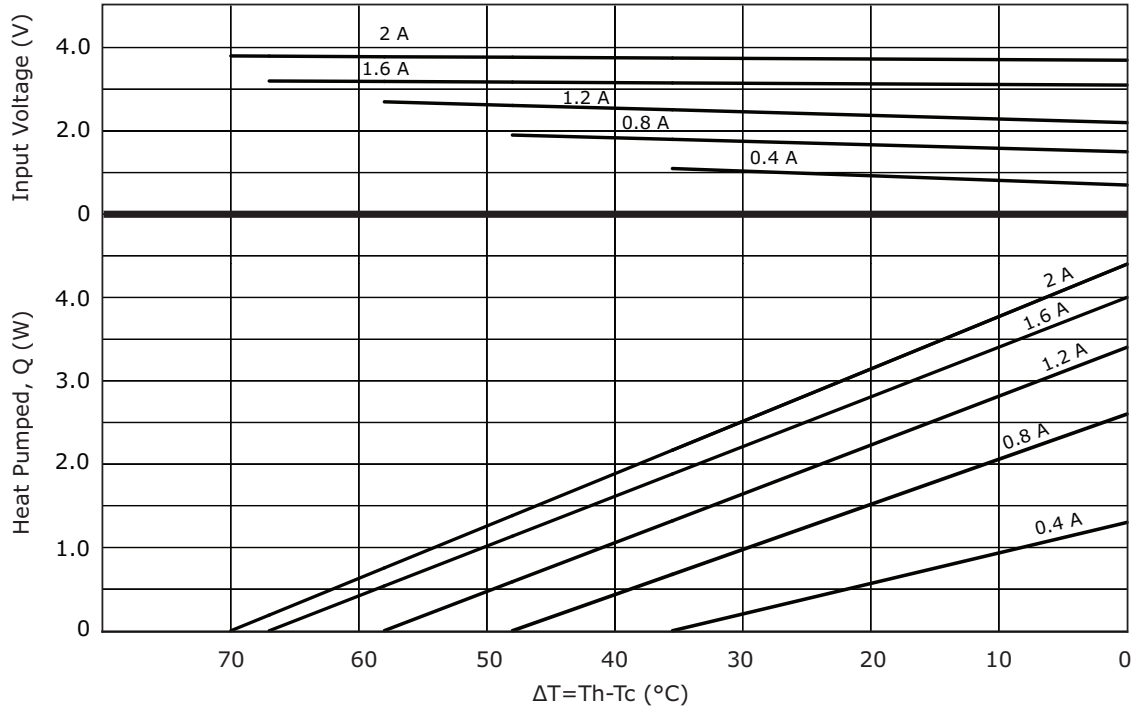


	MATERIAL	PLATING
ceramic plate	96% AL <sub>2</sub> O <sub>3</sub>	
wire leads	22 AWG	tin
sealer	silicon rubber 703 RTV (between cold and hot side plates)	
joint cover	silicon rubber 703 RTV	
marking	P/N & S/N printed on cold side surface	

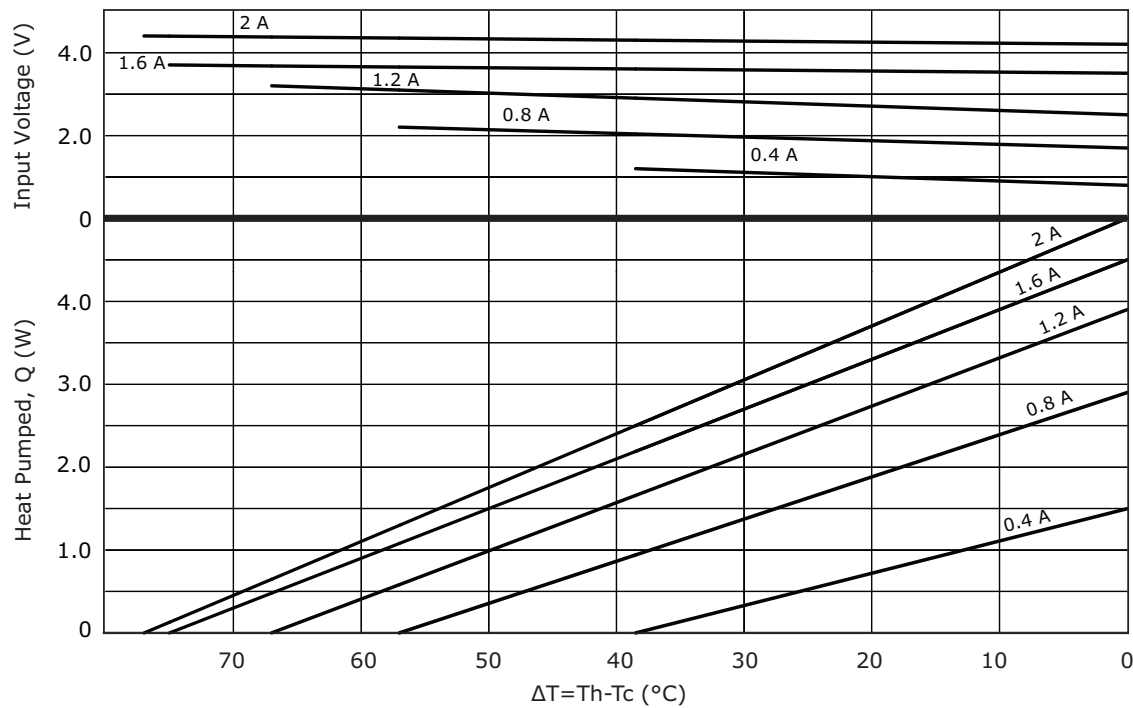


MODEL NO.	LENGTH (mm)	WIDTH (mm)	THICKNESS (mm)
CP20147H	15 ±0.3	15 ±0.3	4.7 ±0.025
CP20247H	20 ±0.3	20 ±0.3	4.7 ±0.025
CP203475H	30 ±0.3	30 ±0.3	4.75 ±0.025

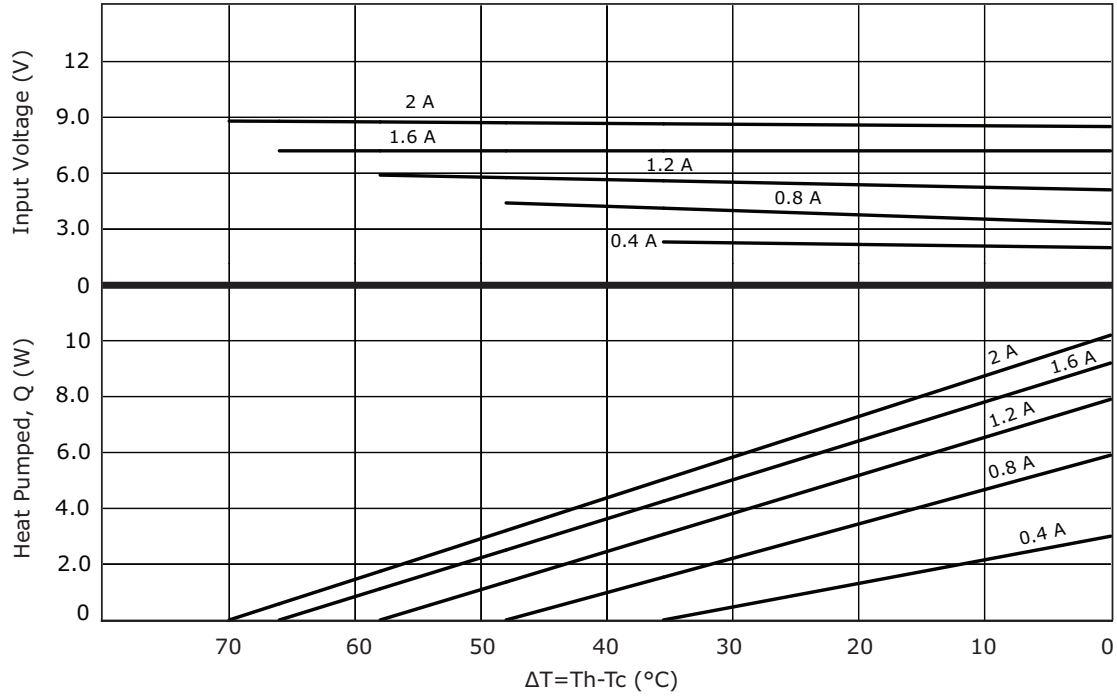
### CP20147H PERFORMANCE (Th=27°C)



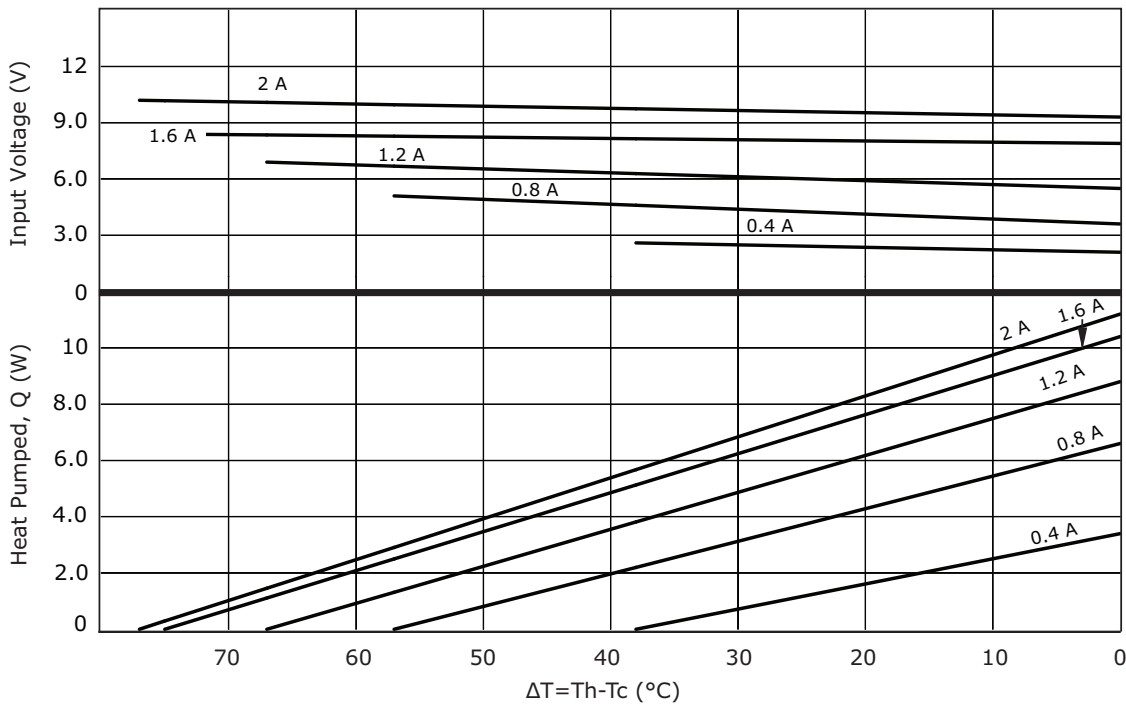
### CP20147H PERFORMANCE (Th=50°C)



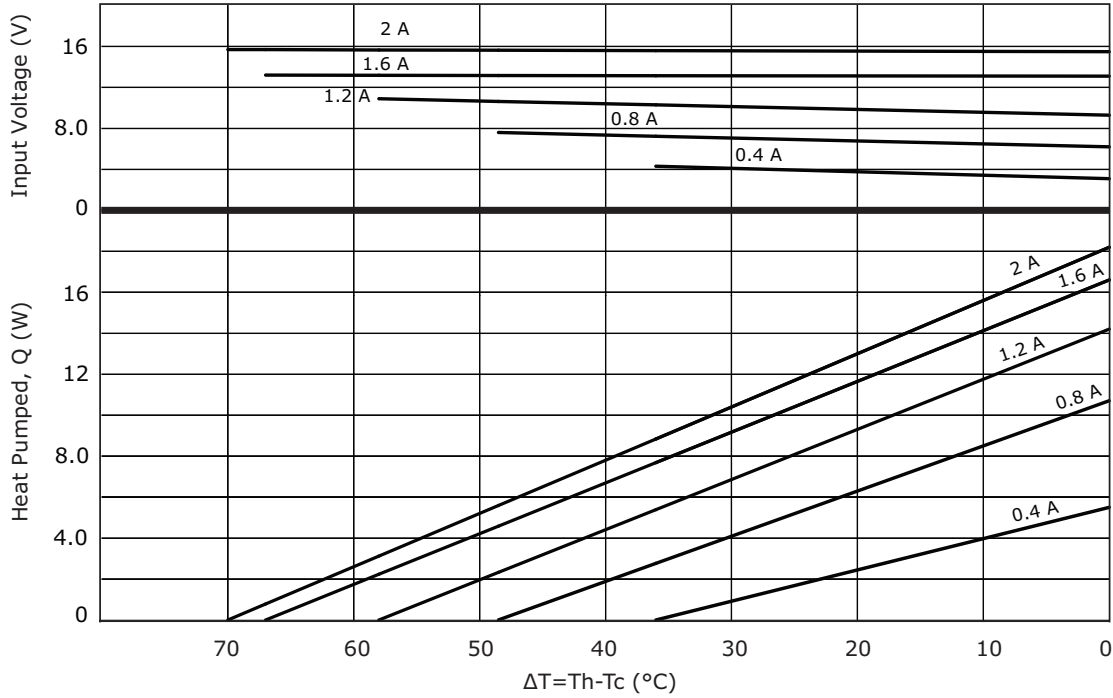
### CP20247H PERFORMANCE (Th=27°C)



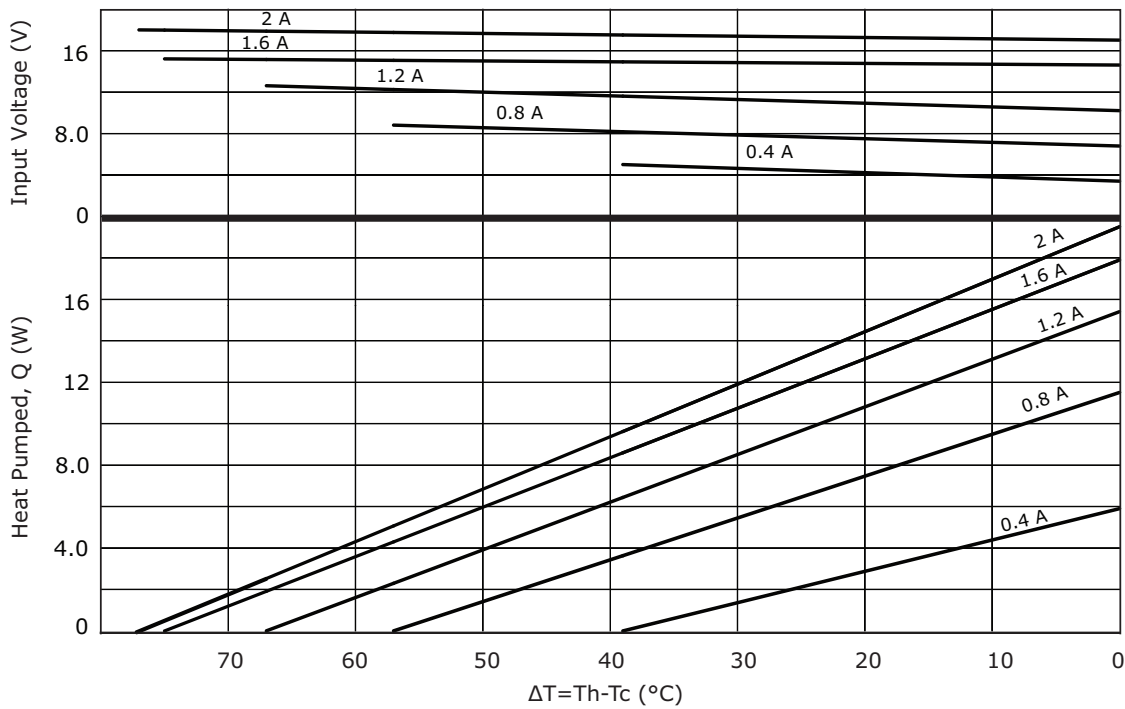
### CP20247H PERFORMANCE (Th=50°C)



### CP203475H PERFORMANCE (Th=27°C)



### CP203475H 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.