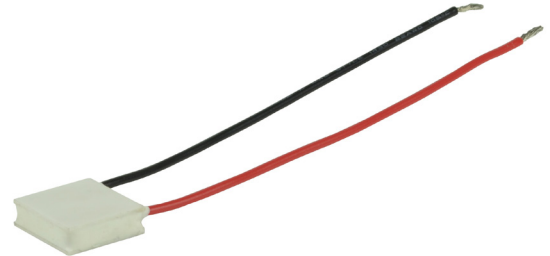




SERIES: CP20H | **DESCRIPTION:** PELTIER MODULE

FEATURES

- arcTEC™ structure on select models
- enhanced reliability for high thermal cycling
- superior thermal performance
- silicon sealed
- wide ΔT max
- precise temperature control
- solid state construction

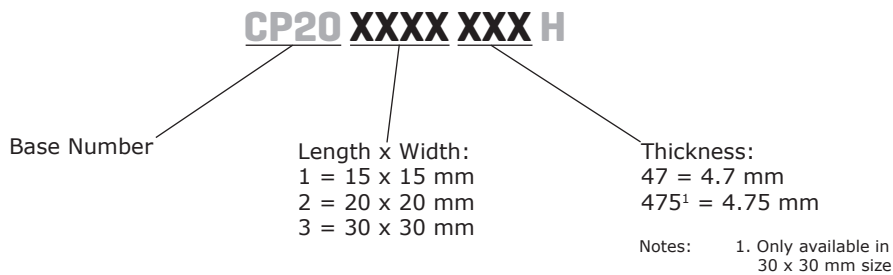


MODEL

MODEL	input voltage ¹ max (Vdc)	input current ² max (A)	output Qmax ³		output ΔT max ⁴	
			T _h =27°C (W)	T _h =50°C (W)	T _h =27°C (°C)	T _h =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 ⁵	15.7	2.0	18.2	19.5	70	77

- Notes:
1. Maximum voltage at ΔT max and T_h=27°C
 2. Maximum current to achieve ΔT max
 3. Maximum heat absorbed at cold side occurs at I_{max}, V_{max}, and $\Delta T=0^\circ\text{C}$
 4. Maximum temperature difference occurs at I_{max}, V_{max}, and Q=0W (ΔT max measured in a vacuum at 1.3 Pa)
 5. Designed with arcTEC™ structure.

PART NUMBER KEY



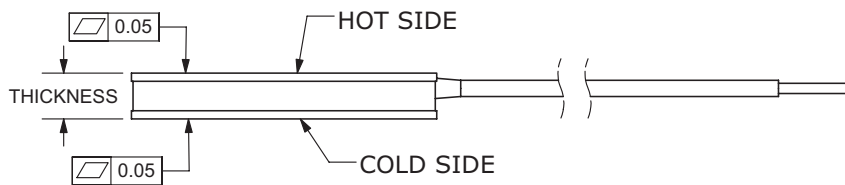
SPECIFICATIONS

parameter	conditions/description	min	typ	max	units
internal resistance ¹	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				

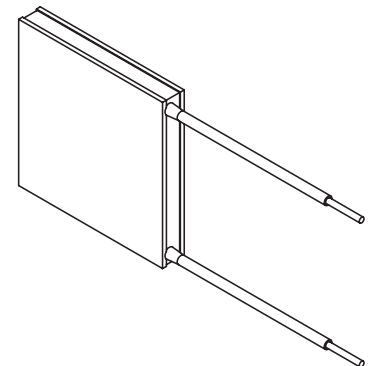
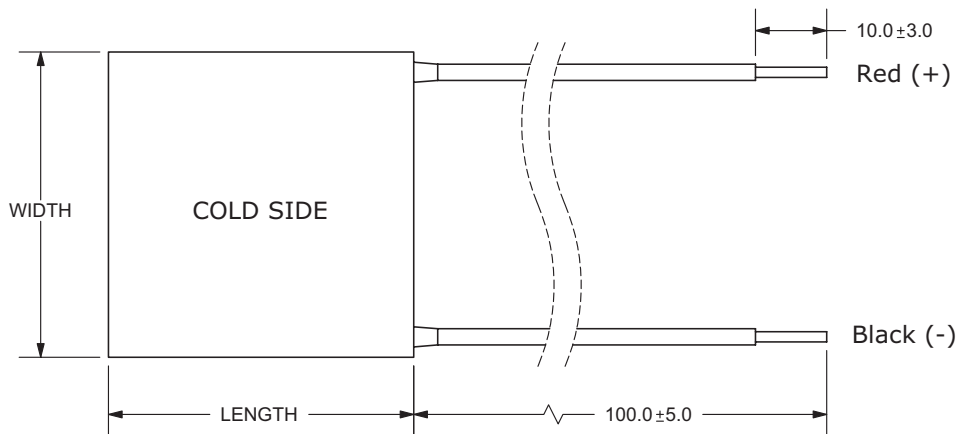
Note: 1. Measured by AC 4-terminal method at 25°C

MECHANICAL DRAWING

units: mm

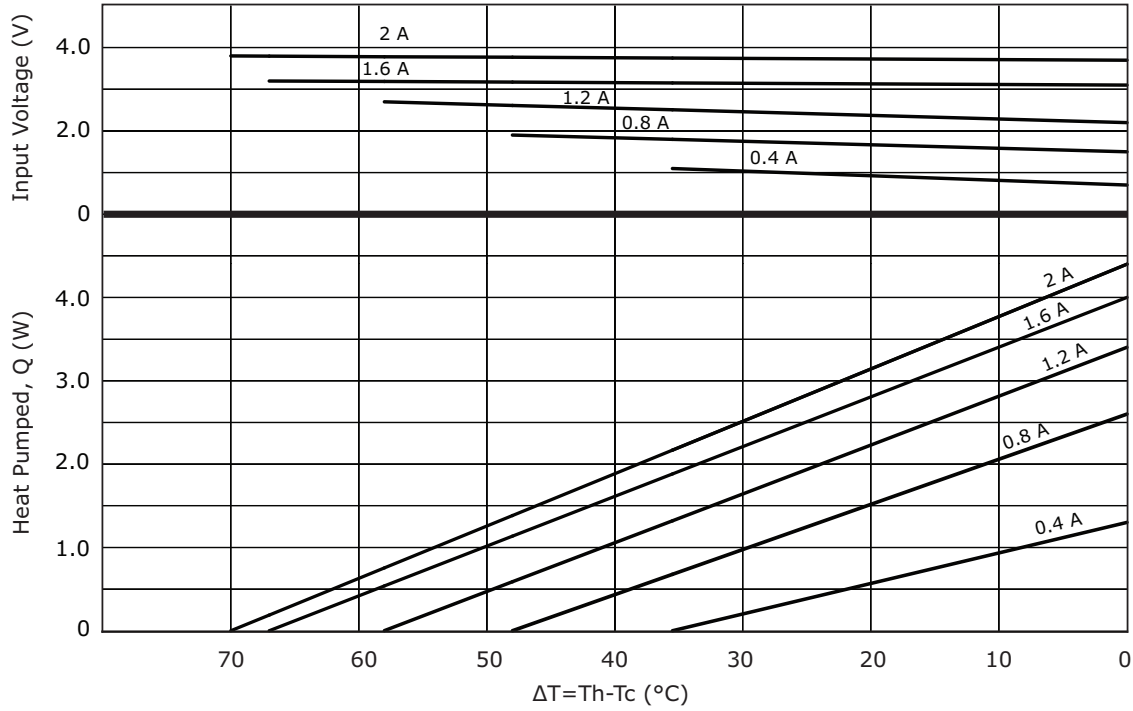


	MATERIAL	PLATING
ceramic plate	96% AL ₂ O ₃	
wire leads	22 AWG	tin
sealer	silicon rubber 703 RTV (between cold and hot side plates)	
joint cover	silicon rubber 703 RTV	
marking	P/N & S/N printed on cold side surface	

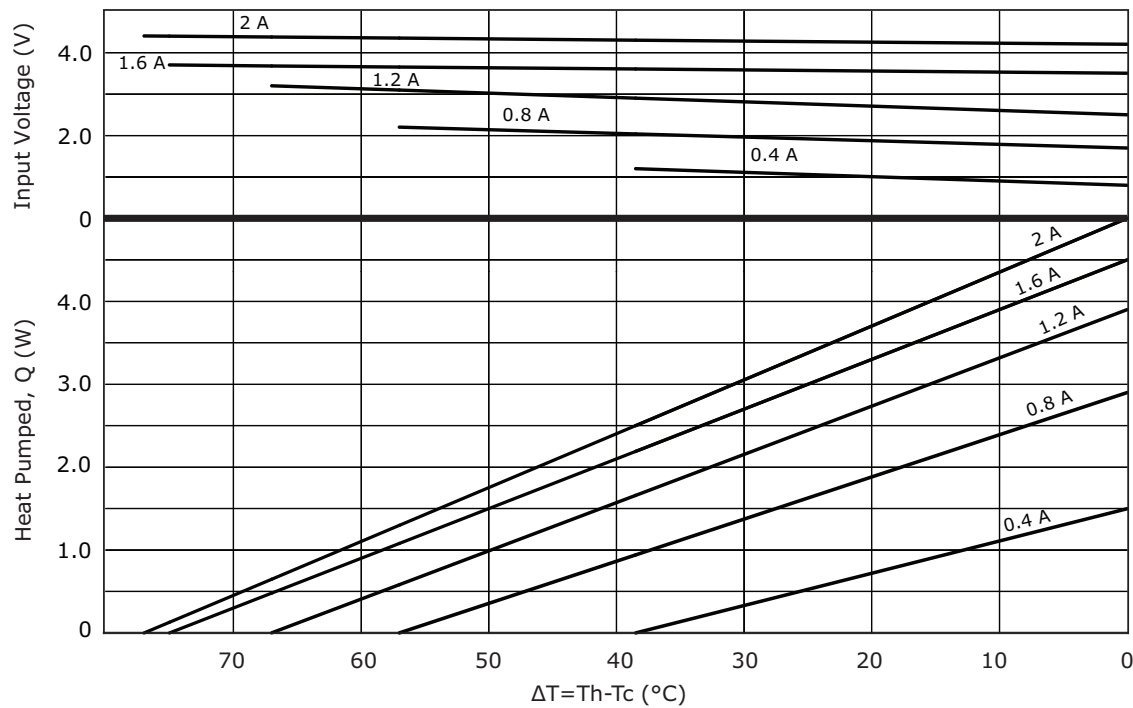


MODEL NO.	LENGTH (mm)	WIDTH (mm)	THICKNESS (mm)
CP20147H	15 ± 0.3	15 ± 0.3	4.7 ± 0.025
CP20247H	20 ± 0.3	20 ± 0.3	4.7 ± 0.025
CP203475H	30 ± 0.3	30 ± 0.3	4.75 ± 0.025

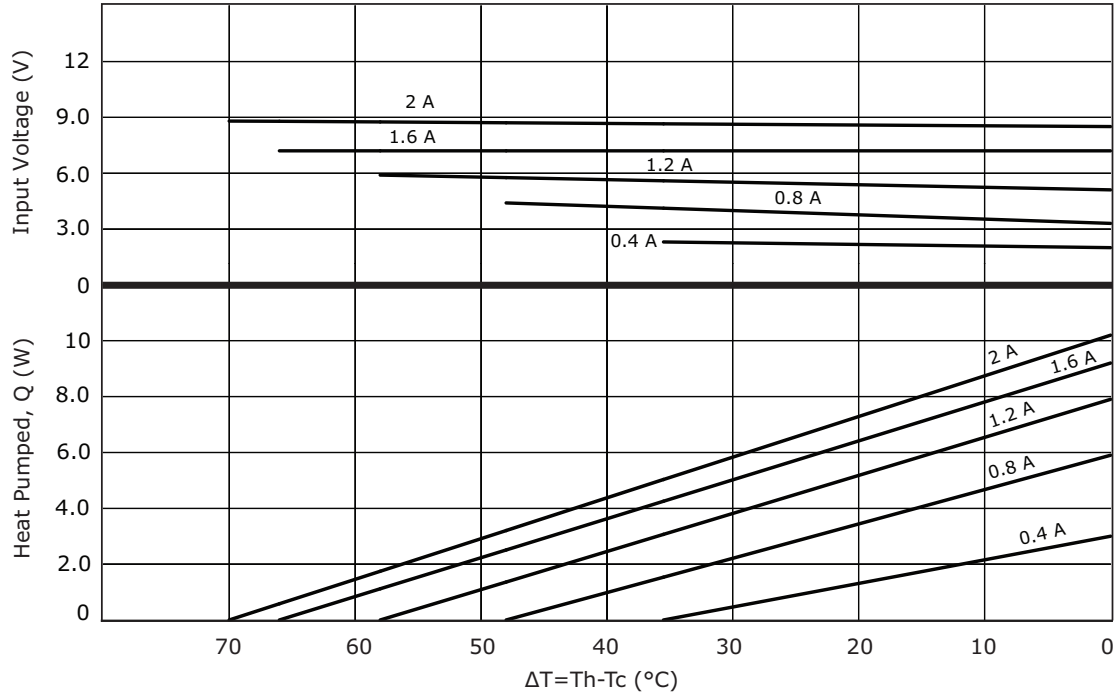
CP20147H PERFORMANCE (Th=27°C)



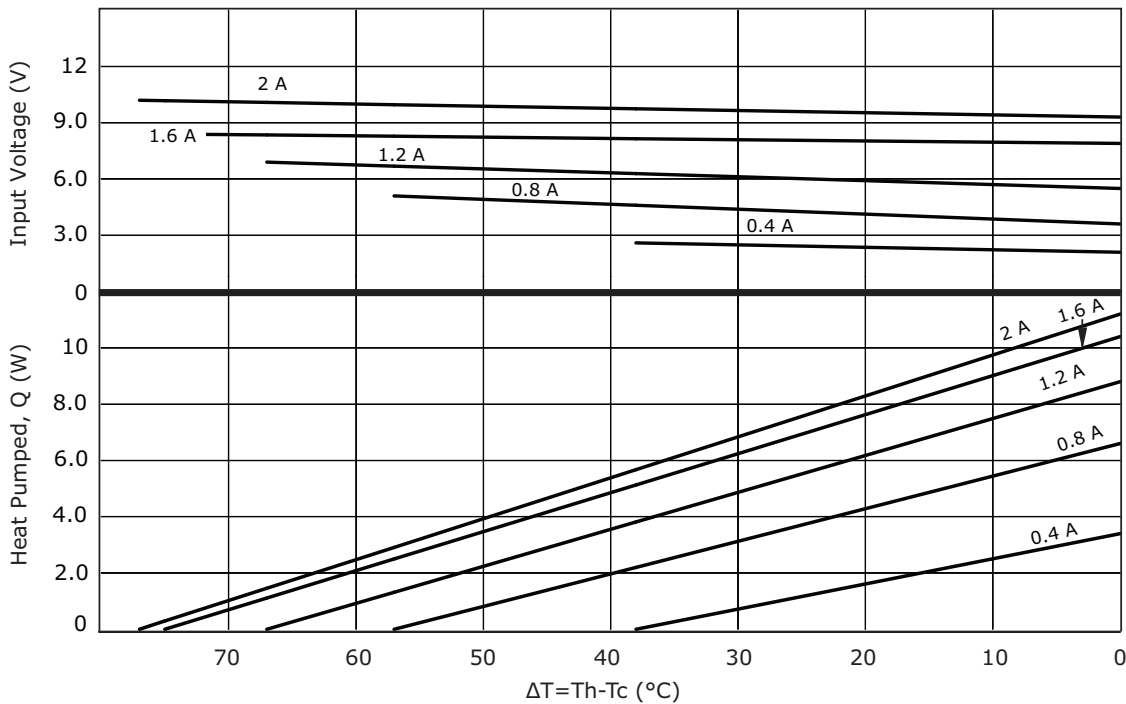
CP20147H PERFORMANCE (Th=50°C)



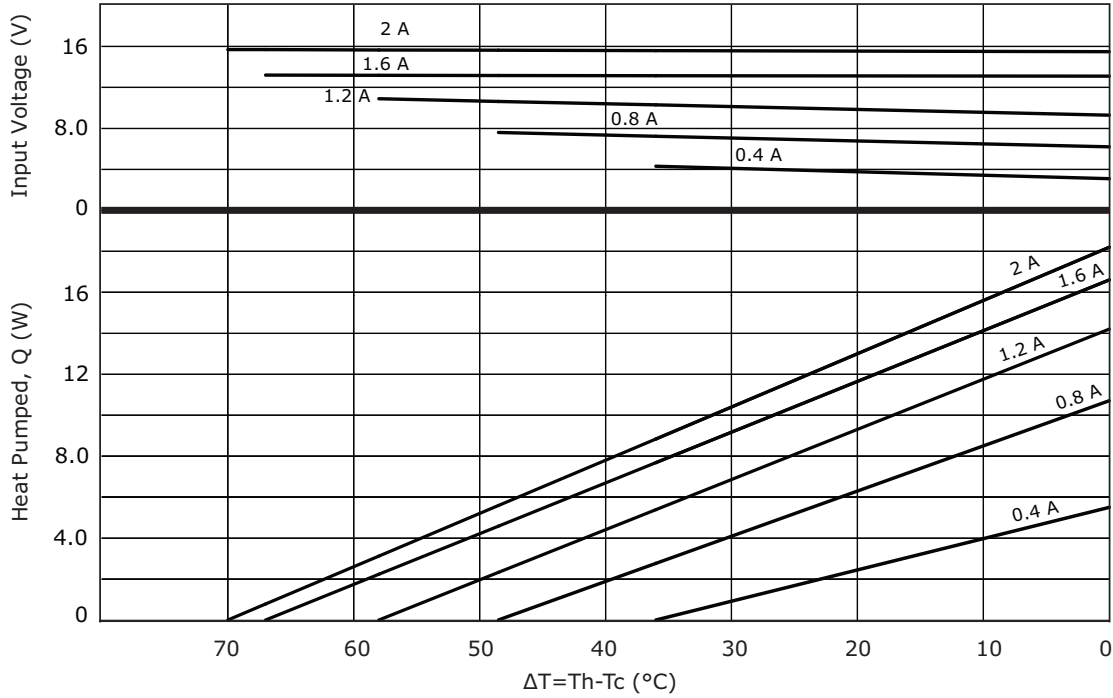
CP20247H PERFORMANCE (Th=27°C)



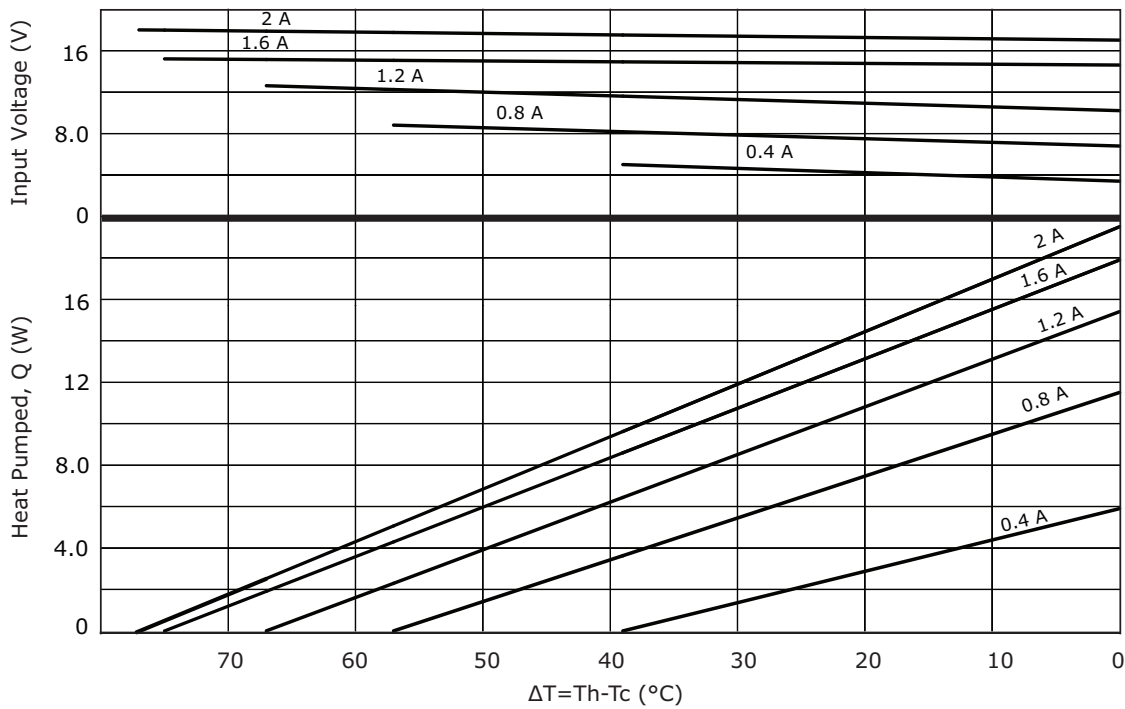
CP20247H PERFORMANCE (Th=50°C)



CP203475H PERFORMANCE (Th=27°C)



CP203475H PERFORMANCE (Th=50°C)



REVISION HISTORY

rev.	description	date
1.0	initial release	09/08/2016
1.01	updated datasheet	09/25/2017

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



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

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