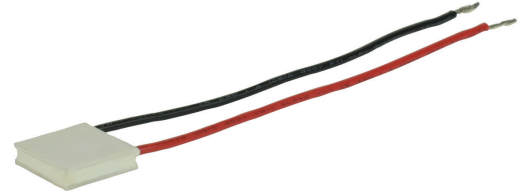




SERIES: CP30H | DESCRIPTION: PELTIER MODULE

FEATURES

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



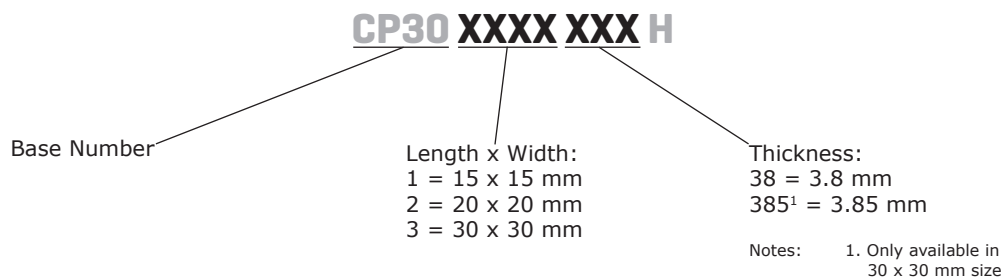
MODEL

MODEL	input voltage ¹ max (Vdc)	input current ² max (A)	output Qmax ³		output ΔT_{max} ⁴	
			$T_h = 27^\circ\text{C}$ (W)	$T_h = 50^\circ\text{C}$ (W)	$T_h = 27^\circ\text{C}$ (°C)	$T_h = 50^\circ\text{C}$ (°C)
CP30138H	3.8	3.0	7.3	8.0	70	77
CP30238H	8.8	3.0	16.6	18.0	70	77
CP303385H ⁵	15.7	3.0	29.8	32.5	70	77

Notes:

1. Maximum voltage at ΔT_{max} and $T_h = 27^\circ\text{C}$
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 $Q = 0\text{W}$ (ΔT_{max} measured in a vacuum at 1.3 Pa)
5. Designed with arcTEC™ structure.

PART NUMBER KEY



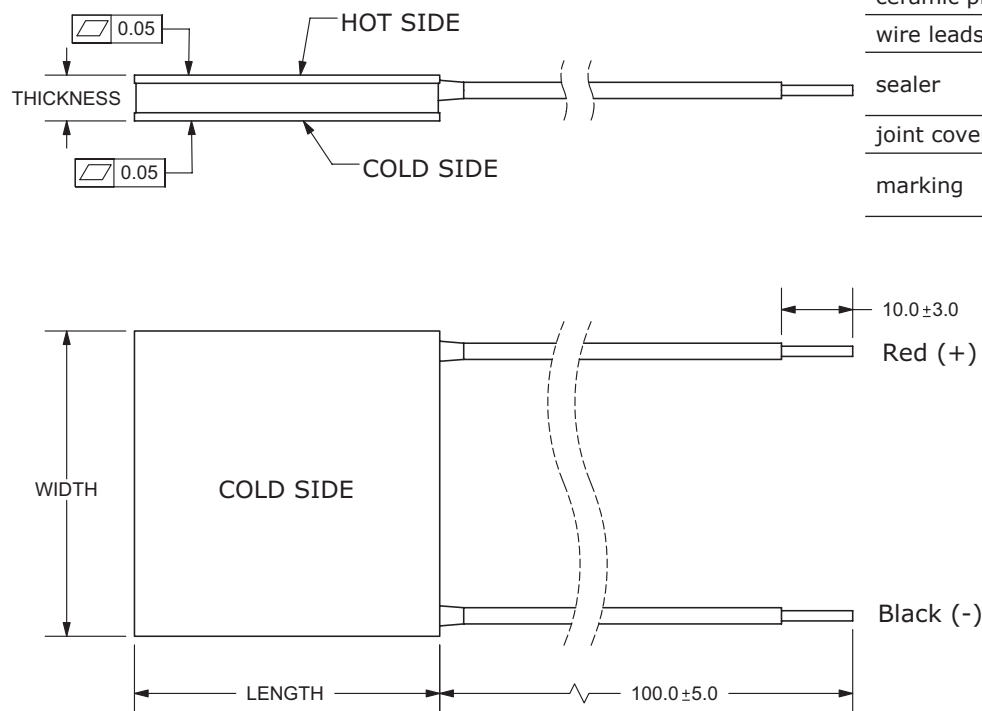
SPECIFICATIONS

parameter	conditions/description	min	typ	max	units
internal resistance ¹	CP30138H	0.9	1.0	1.1	Ω
	CP30238H	1.98	2.20	2.42	Ω
	CP303385H	3.6	4.0	4.4	Ω
solder melting temperature	connection between thermoelectric pairs	235			$^{\circ}\text{C}$
assembly compression				1	MPa
hot side plate				80	$^{\circ}\text{C}$
RoHS	2011/65/EU				

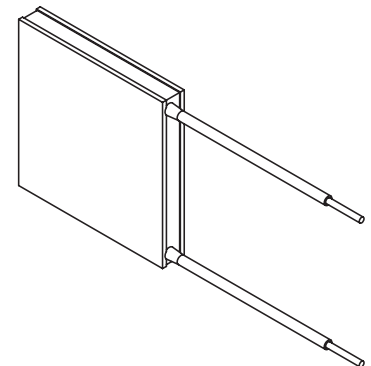
Note: 1. Measured by AC 4-terminal method at 25 $^{\circ}\text{C}$

MECHANICAL DRAWING

units: mm

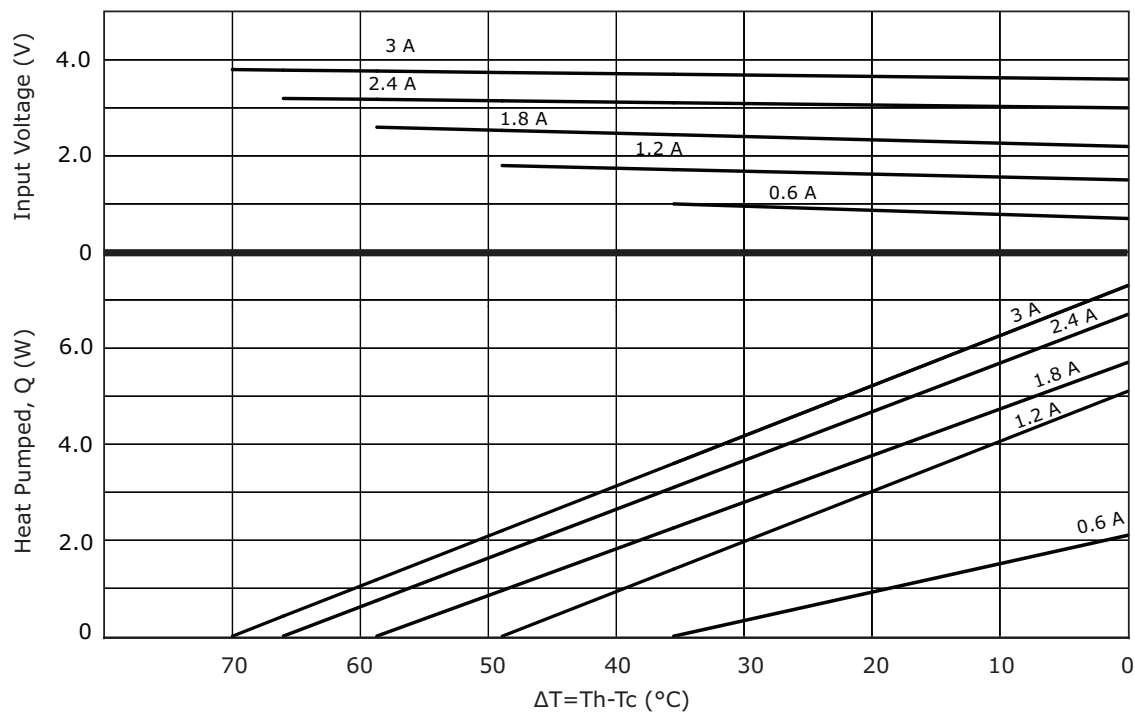


	MATERIAL	PLATING
ceramic plate	96% Al_2O_3	
wire leads	22 AWG	tin
sealer	silicon rubber 703 RTV (between cold and hot side plates)	
joint cover	silicon rubber 703 RTV	
marking	P/N & S/N printed on cold side surface	

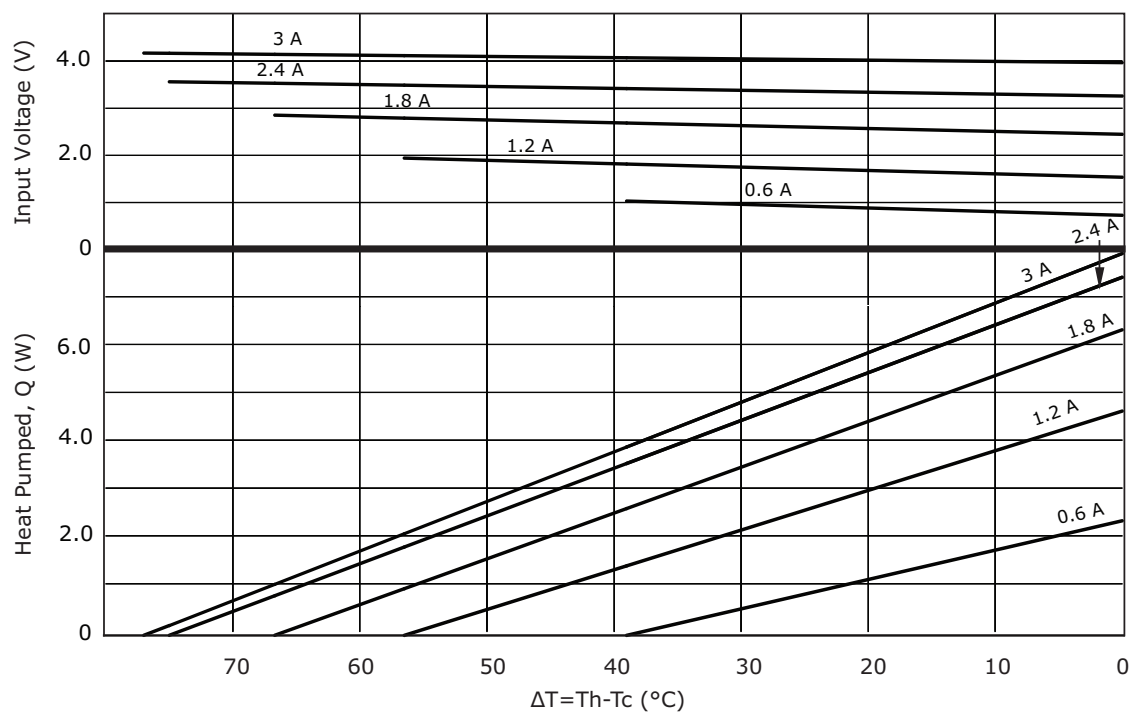


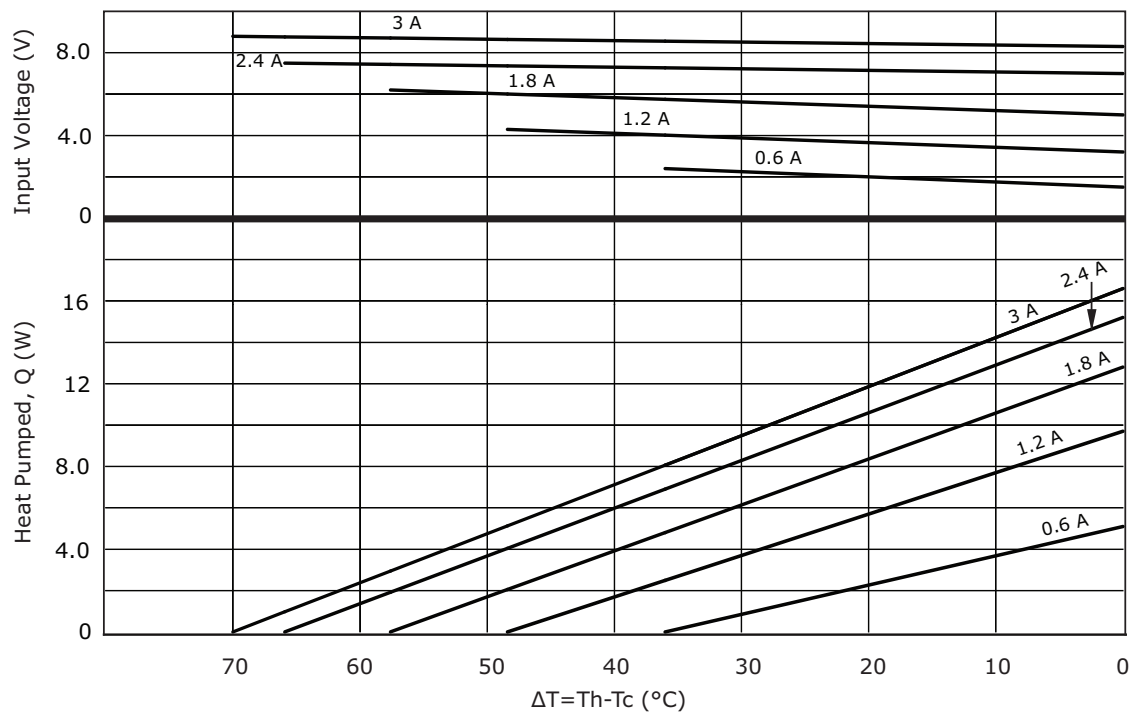
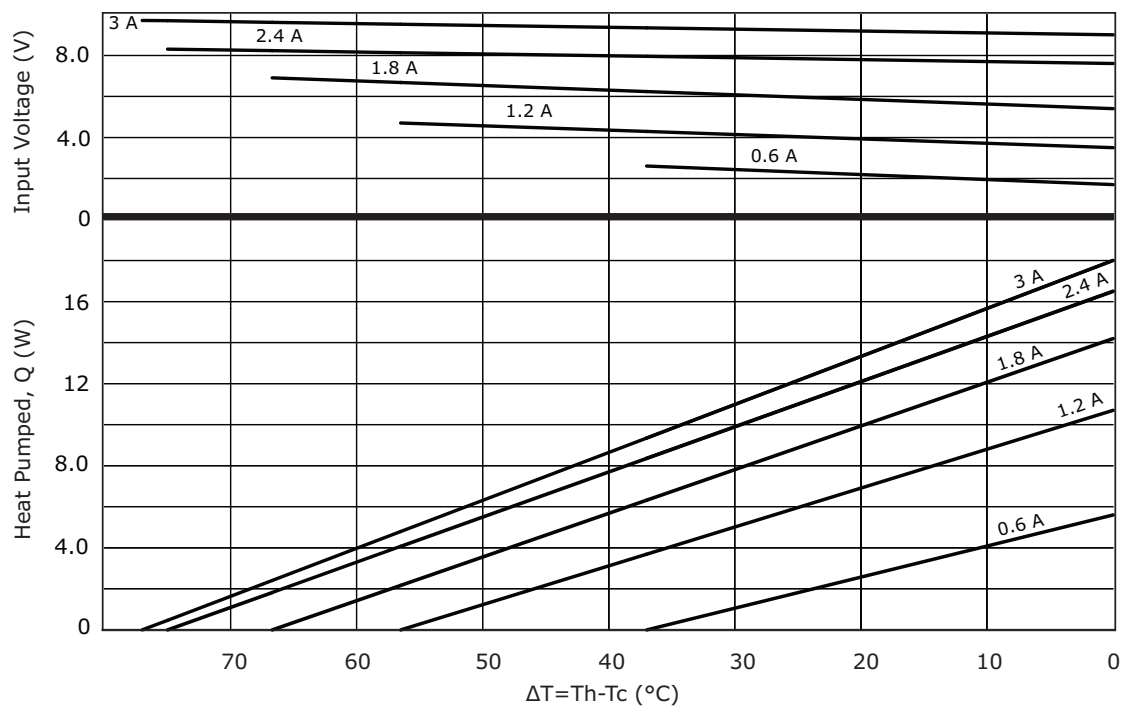
MODEL NO.	LENGTH (mm)	WIDTH (mm)	THICKNESS (mm)
CP30138H	15 ± 0.3	15 ± 0.3	3.8 ± 0.025
CP30238H	20 ± 0.3	20 ± 0.3	3.8 ± 0.025
CP303385H	30 ± 0.3	30 ± 0.3	3.85 ± 0.02

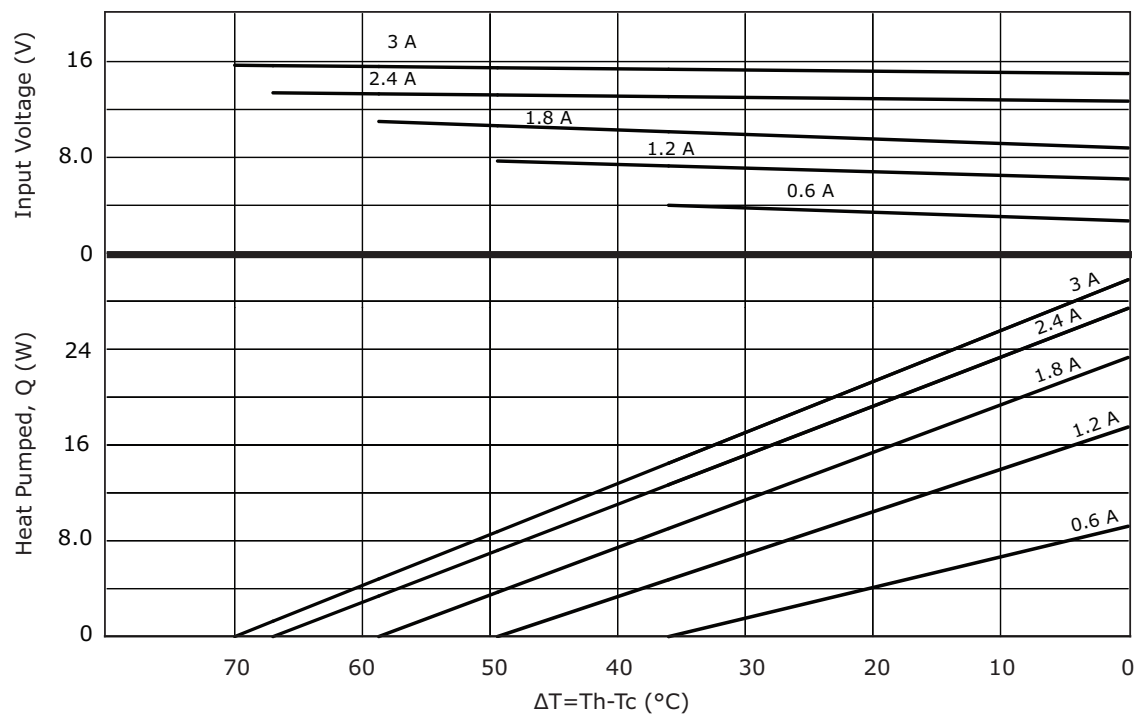
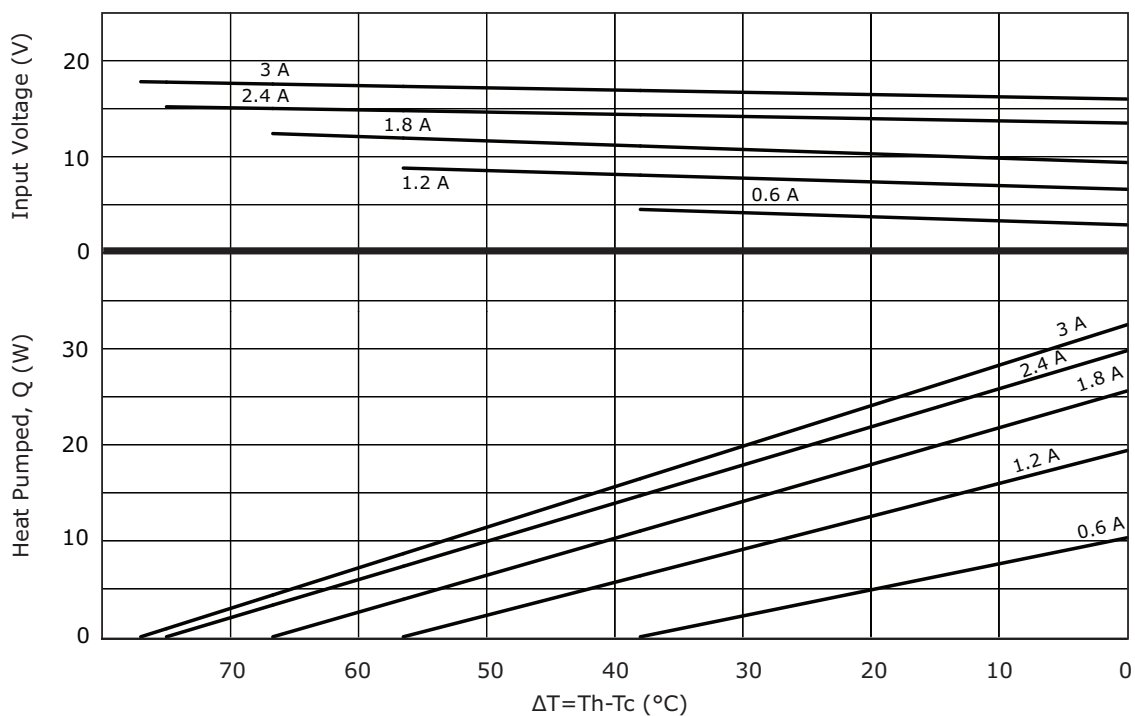
CP30138H PERFORMANCE (Th=27°C)



CP30138H PERFORMANCE (Th=50°C)



CP30238H PERFORMANCE (Th=27°C)**CP30238H PERFORMANCE (Th=50°C)**

CP303385H PERFORMANCE (Th=27°C)**CP303385H 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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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.