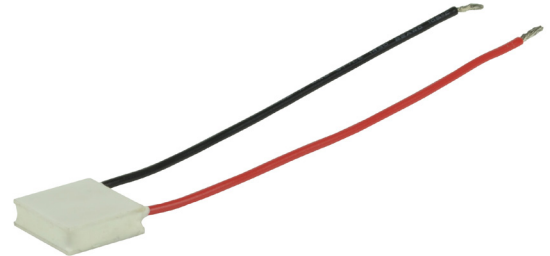




SERIES: CP20H | DESCRIPTION: PELTIER MODULE

FEATURES

- arcTEC™ structure on select models
- enhanced reliability for high thermal cycling
- superior thermal performance
- silicon sealed
- wide $\Delta T_{\max}$
- precise temperature control
- solid state construction



MODEL

MODEL	input voltage ¹ max (Vdc)	input current ² max (A)	internal resistance ³ typ ($\Omega \pm 10\%$)	output Qmax ⁴		output $\Delta T_{\max}$ ⁵	
				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	1.65	4.4	5.0	70	77
CP20247H	8.8	2.0	3.7	10.2	11.2	70	77
CP20301547H	7.6	2.0	3.32	9	9.9	70	77
CP203475H ⁶	15.7	2.0	6.7	18.2	19.5	70	77

Notes:

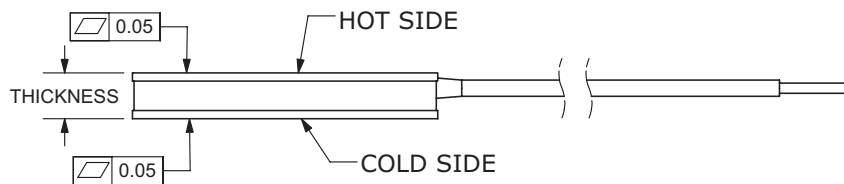
1. Maximum voltage at $\Delta T_{\max}$ and T_h=27°C
2. Maximum current to achieve $\Delta T_{\max}$
3. Measured by AC 4-terminal method at 25°C
4. Maximum heat absorbed at cold side occurs at I_{max}, V_{max} and $\Delta T=0^{\circ}\text{C}$
5. Maximum temperature difference occurs at I_{max}, V_{max} and Q=0W ($\Delta T_{\max}$ measured in a vacuum at 1.3 Pa)
6. Designed with arcTEC™ structure.

SPECIFICATIONS

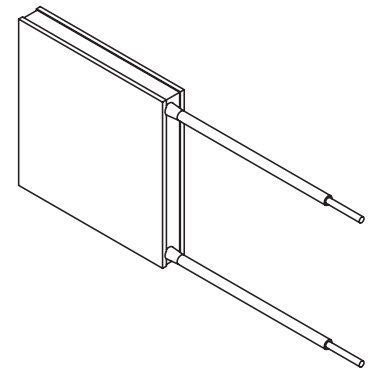
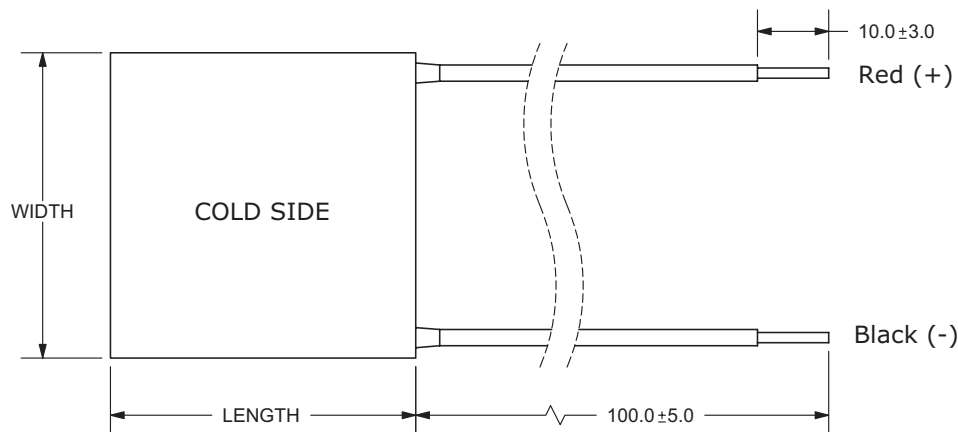
parameter	conditions/description	min	typ	max	units
solder melting temperature	connection between thermoelectric pairs	235			°C
assembly compression				1	MPa
hot side plate				80	°C
RoHS	2011/65/EU				

MECHANICAL DRAWING

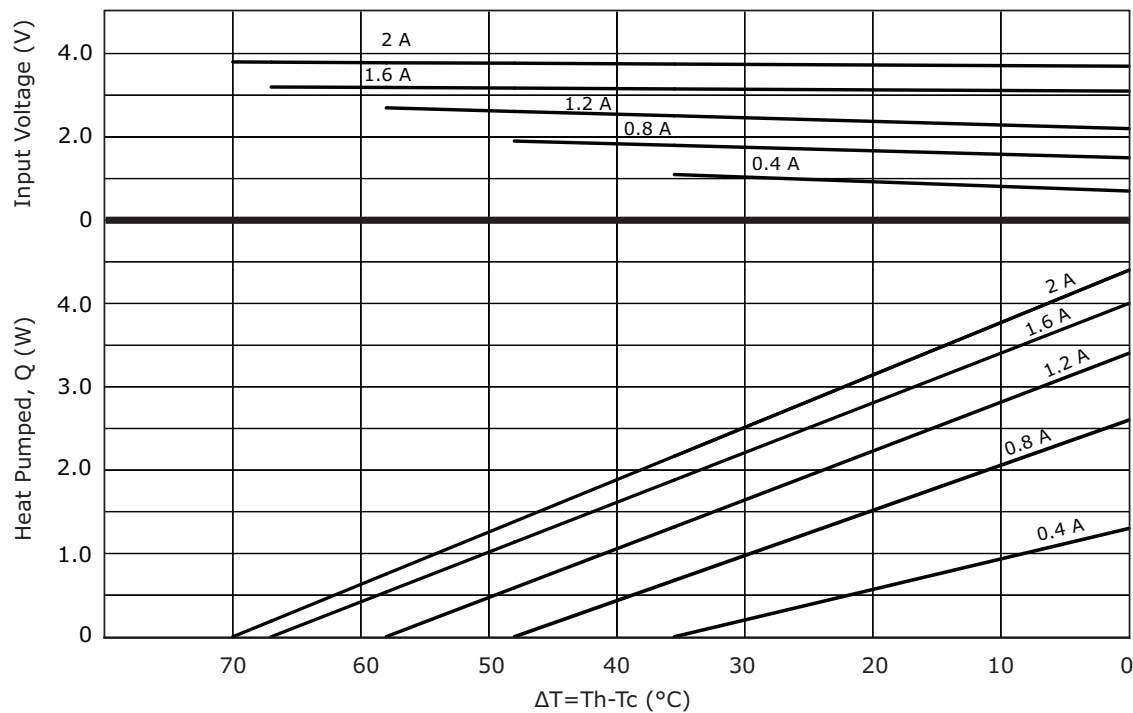
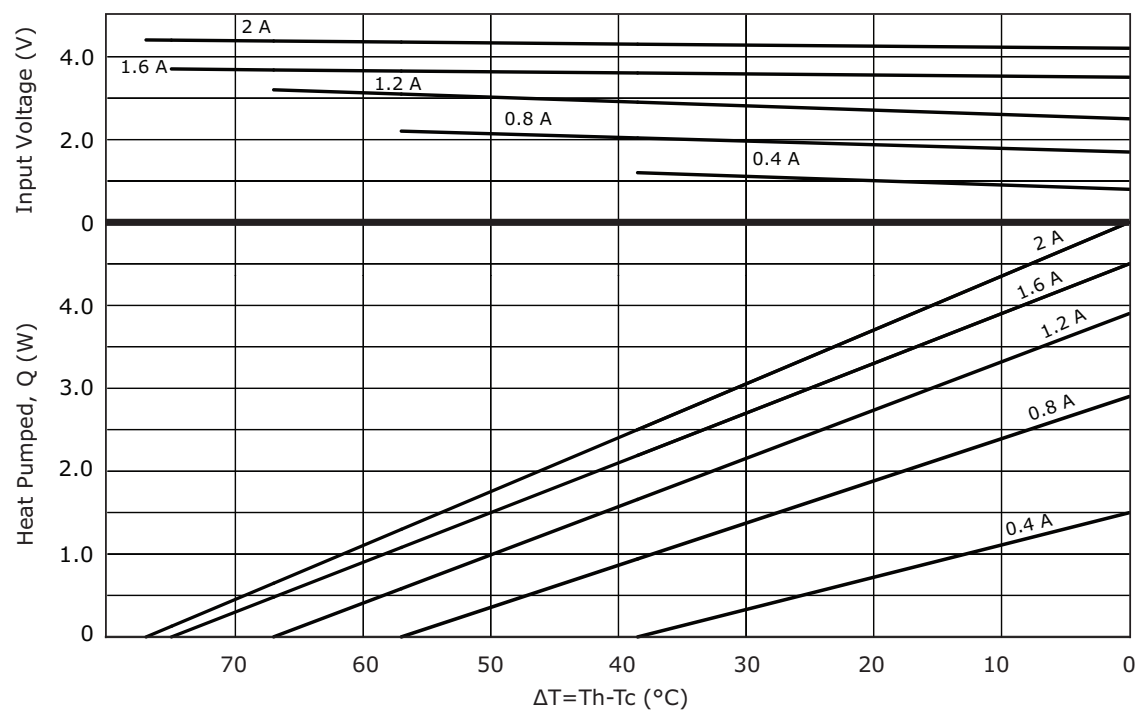
units: mm

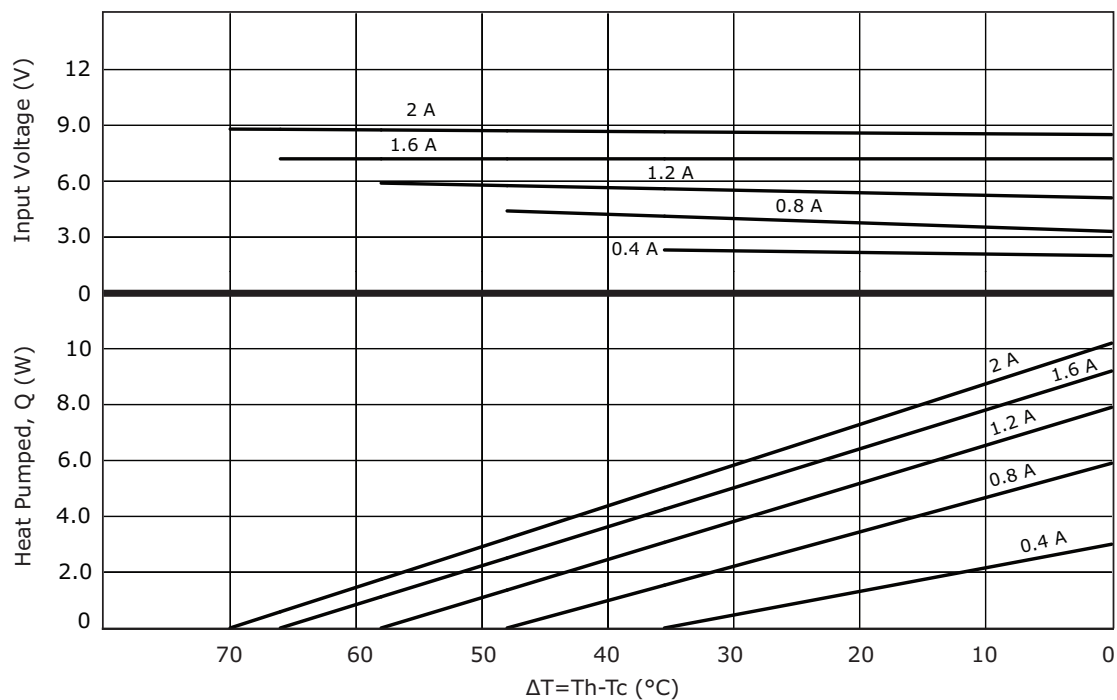
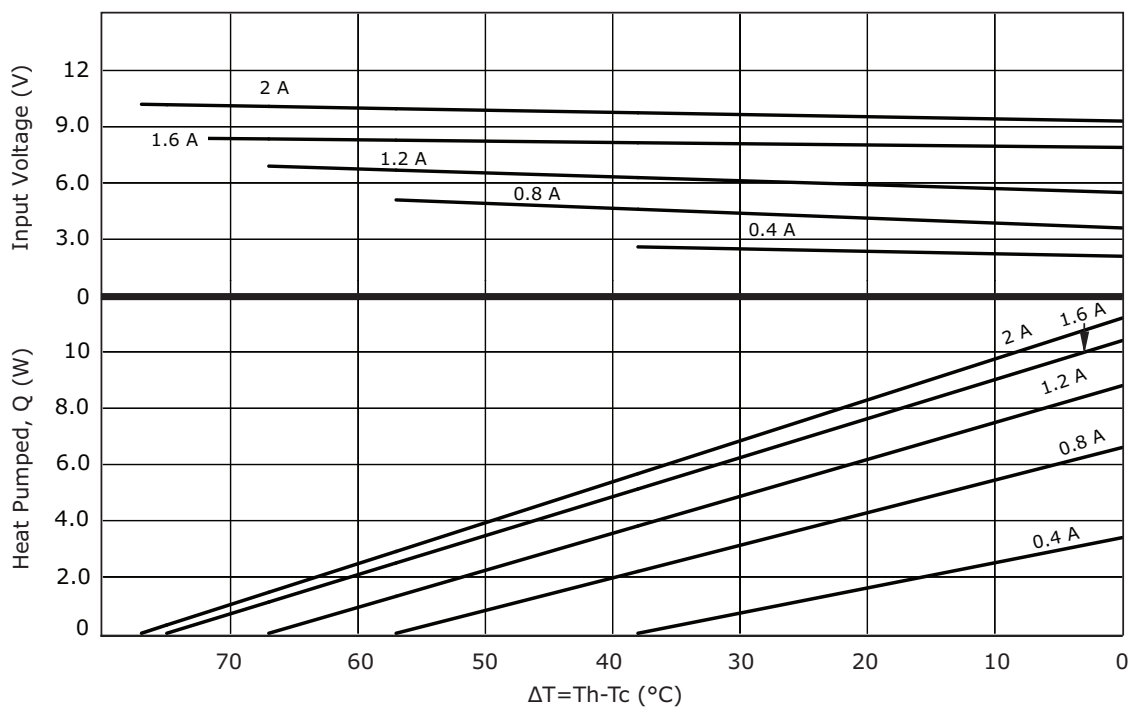


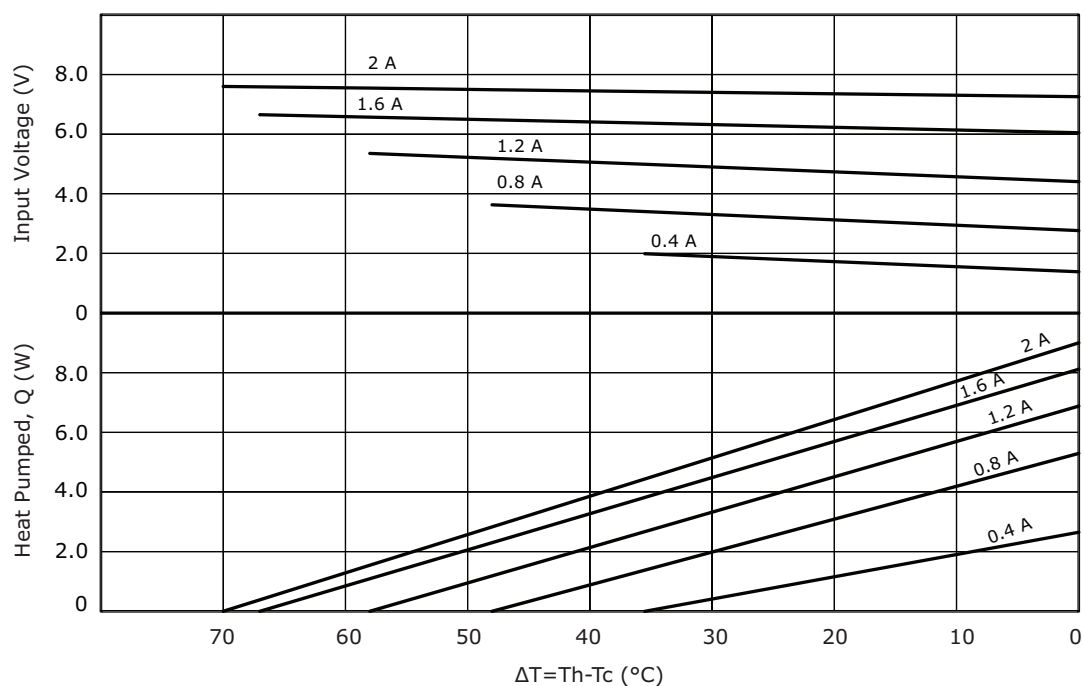
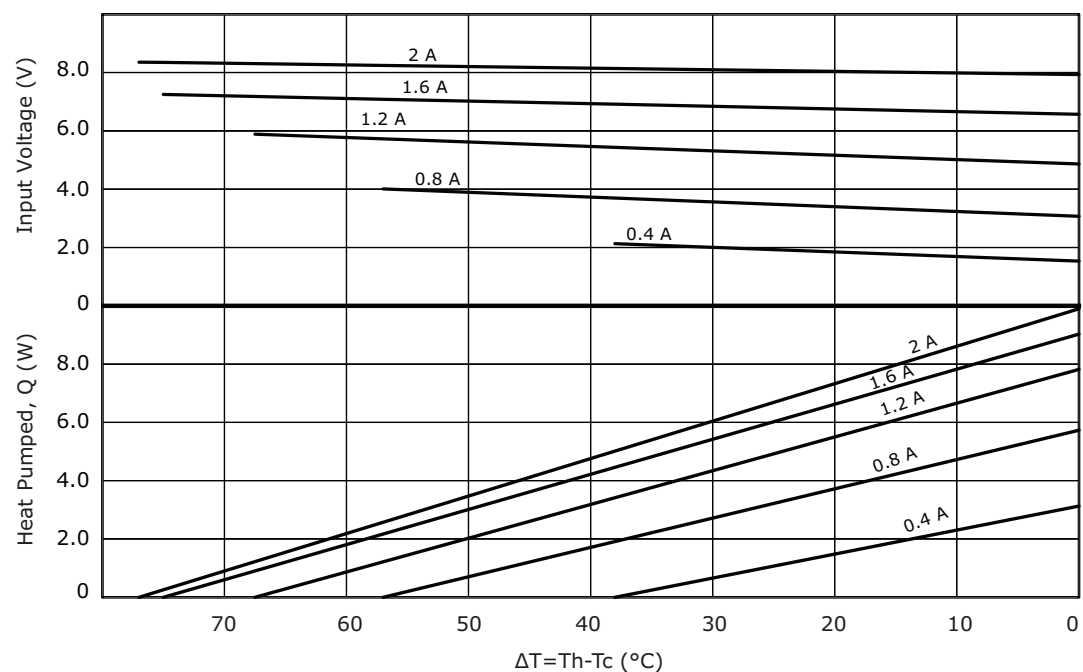
	MATERIAL	PLATING
ceramic plate	96% Al_2O_3	
wire leads	22 AWG	tin
sealer	silicon rubber 703 RTV (between cold and hot side plates)	
joint cover	silicon rubber 703 RTV	
marking	P/N & S/N printed on cold side surface	

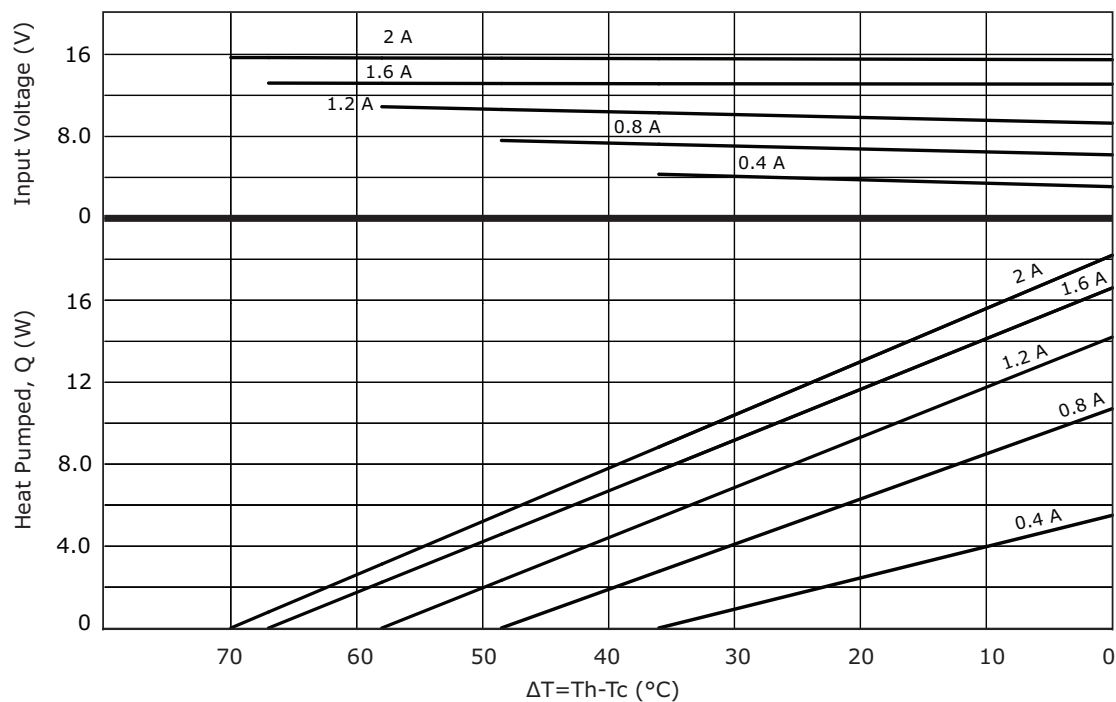
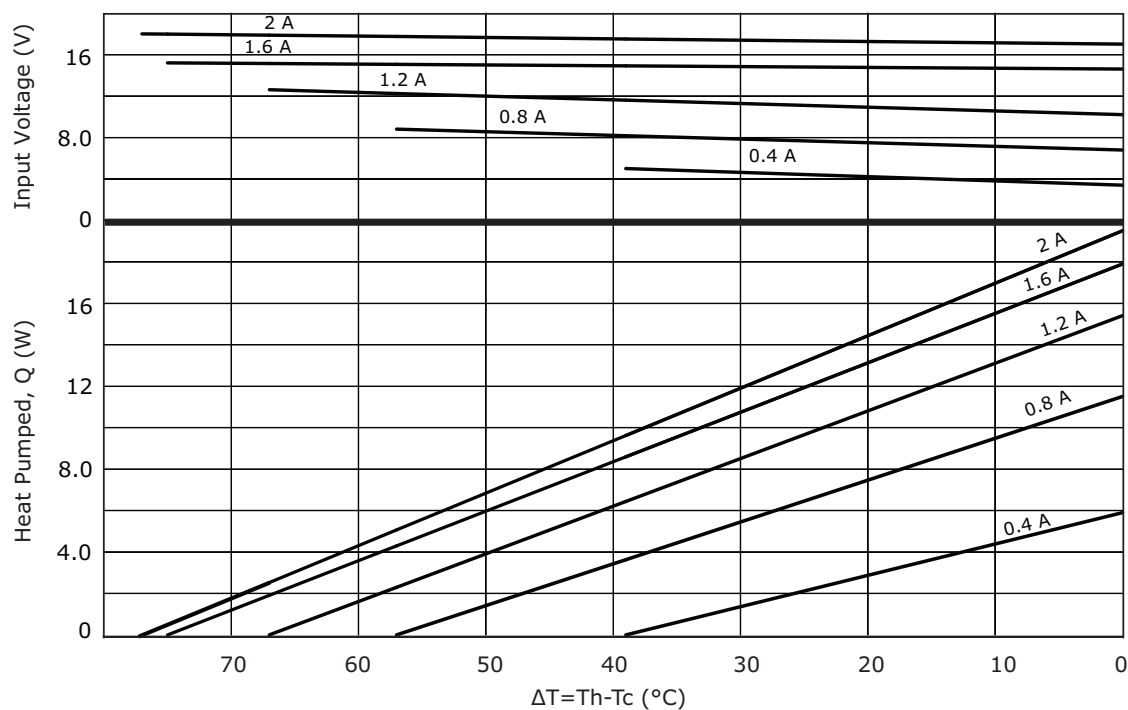


MODEL NO.	LENGTH (mm)	WIDTH (mm)	THICKNESS (mm)
CP20147H	15 ± 0.3	15 ± 0.3	4.7 ± 0.025
CP20247H	20 ± 0.3	20 ± 0.3	4.7 ± 0.025
CP20301547H	30 ± 0.3	15 ± 0.3	4.7 ± 0.025
CP203475H	30 ± 0.3	30 ± 0.3	4.75 ± 0.025

CP20147H PERFORMANCE (Th=27°C)**CP20147H PERFORMANCE (Th=50°C)**

CP20247H PERFORMANCE (Th=27°C)**CP20247H PERFORMANCE (Th=50°C)**

CP20301547H PERFORMANCE (Th=27°C)**CP20301547H 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
1.02	added new model	05/21/2018

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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