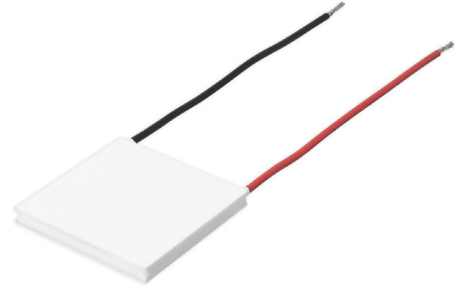


SERIES: CP140 | **DESCRIPTION:** PELTIER MODULE**FEATURES**

- arcTEC™ structure
- 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)	internal resistance ³ typ ($\Omega \pm 10\%$)	output Qmax ⁴		output ΔT max ⁵	
				$T_h = 27^\circ\text{C}$ (W)	$T_h = 50^\circ\text{C}$ (W)	$T_h = 27^\circ\text{C}$ ($^\circ\text{C}$)	$T_h = 50^\circ\text{C}$ ($^\circ\text{C}$)
CP144044	8.6	14	0.49	67	73	70	77
CP144745325	19.5	14	1.08	157	172	70	77

Notes:

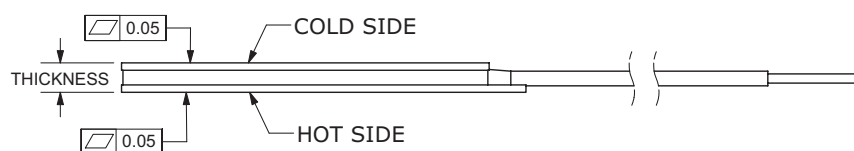
1. Maximum voltage at ΔT max and $T_h = 27^\circ\text{C}$
2. Maximum current to achieve ΔT max
3. Measured by AC 4-terminal method at 25°C
4. Maximum heat absorbed at cold side occurs at I_{max} , V_{max} , and $\Delta T = 0^\circ\text{C}$
5. Maximum temperature difference occurs at I_{max} , V_{max}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

SPECIFICATIONS

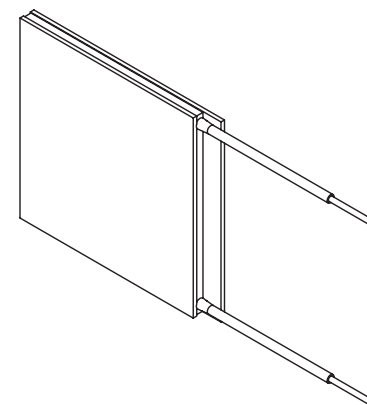
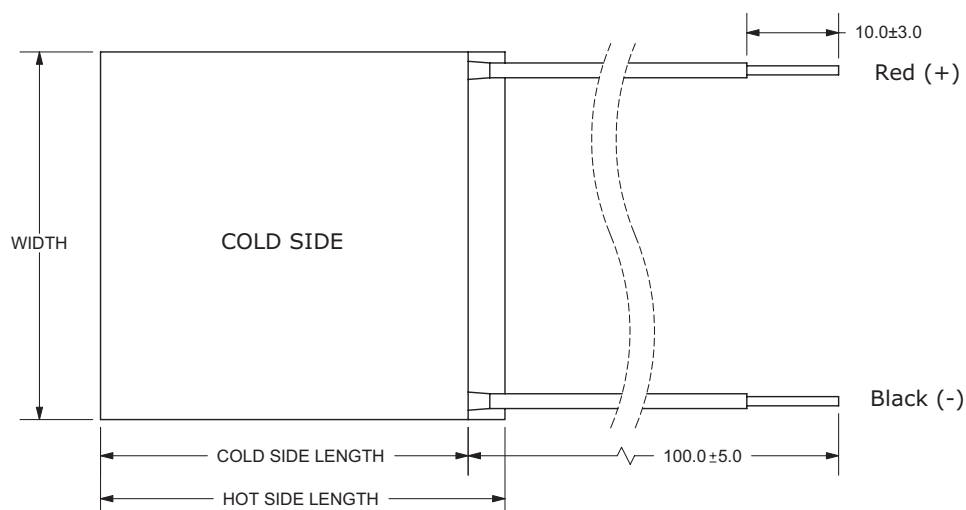
parameter	conditions/description	min	typ	max	units
solder melting temperature	connection between thermoelectric pairs	235			°C
assembly compression				1	MPa
RoHS	yes				

MECHANICAL DRAWING

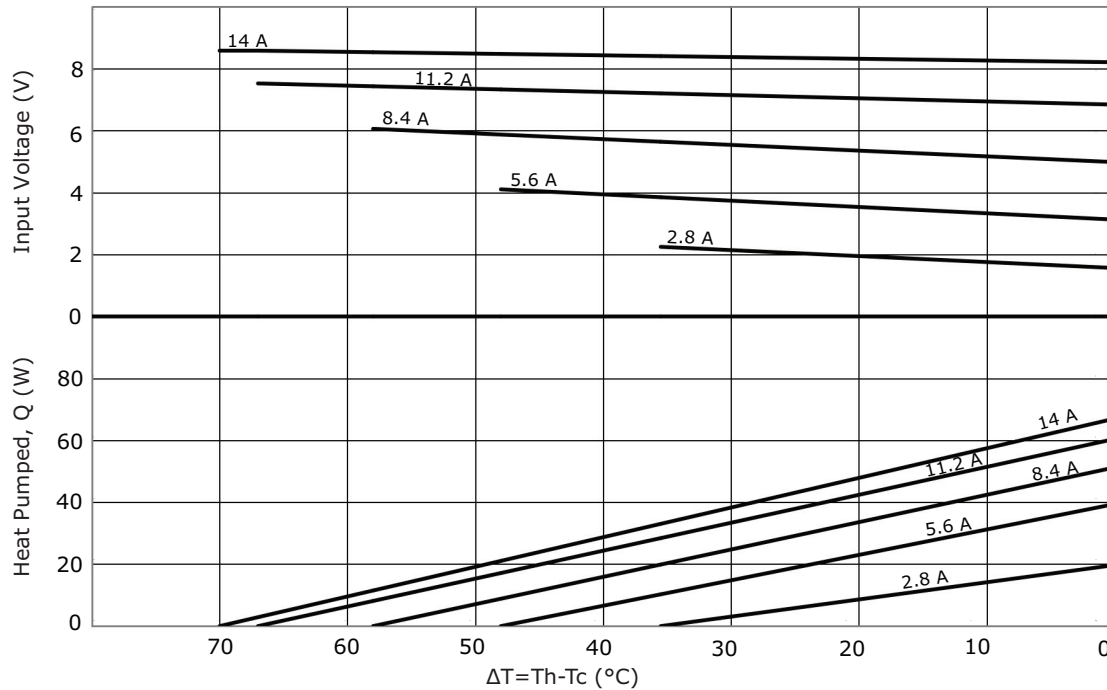
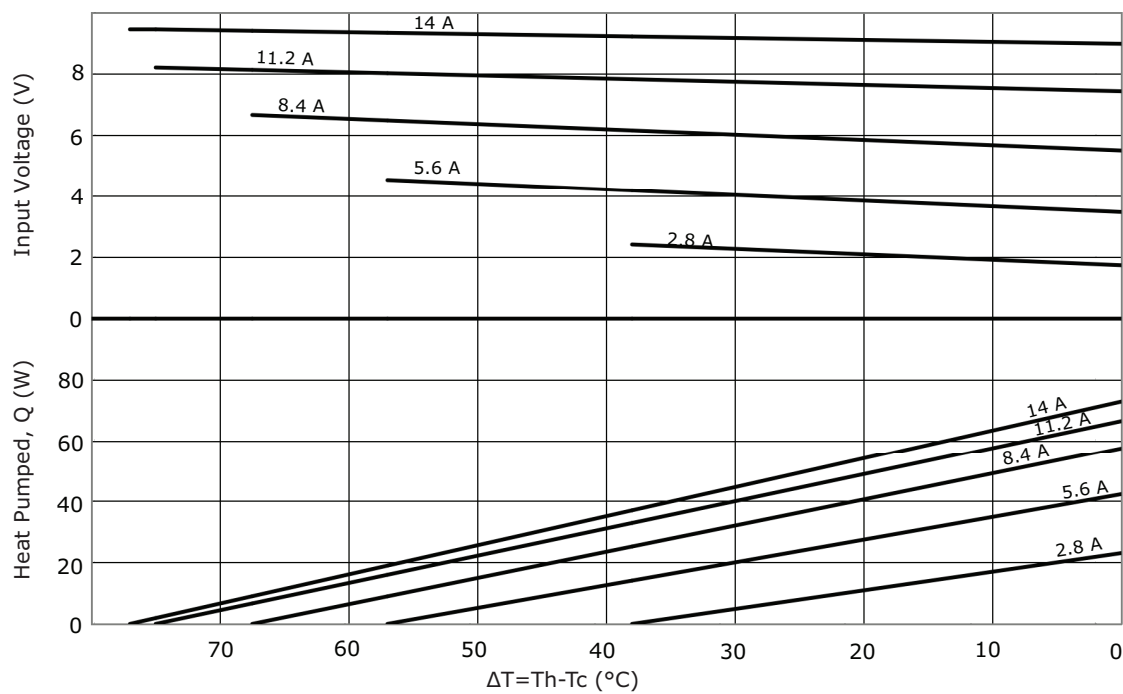
units: mm

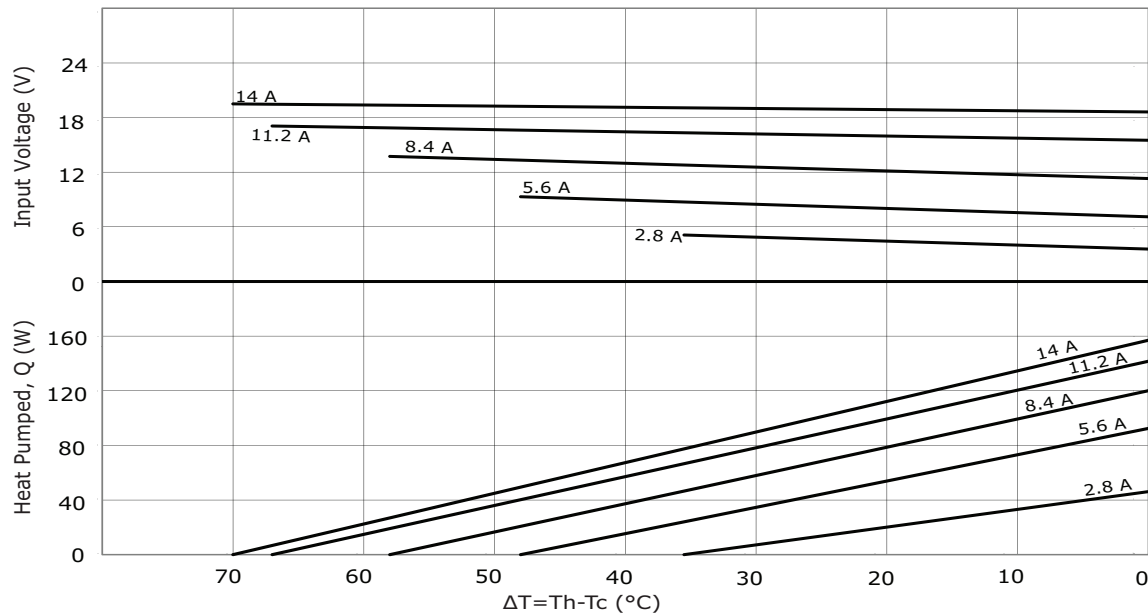
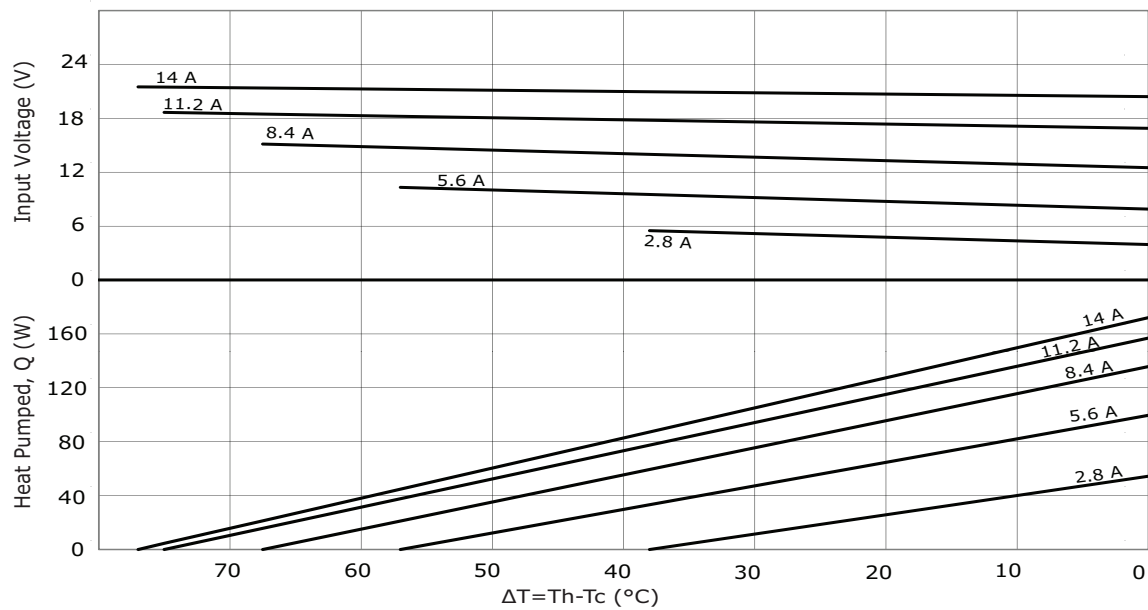


	MATERIAL	PLATING
ceramic plate	96% Al_2O_3	
wire leads	18 AWG	tin
sealer	silicon rubber 703 RTV (between cold and hot side plates)	
joint cover	silicon rubber 703 RTV	
marking	P/N & S/N printed on cold side surface	



MODEL NO.	HOT SIDE LENGTH (mm)	COLD SIDE LENGTH (mm)	WIDTH (mm)	THICKNESS (mm)
CP144044	40 ± 0.3	40 ± 0.3	40 ± 0.3	4.4 ± 0.1
CP144745325	47 ± 0.5	44.8 ± 0.5	44.8 ± 0.3	3.25 ± 0.025

CP144044 PERFORMANCE (Th=27°C)**CP144044 PERFORMANCE (Th=50°C)**

CP144745325 PERFORMANCE (Th=27°C)**CP144745325 PERFORMANCE (Th=50°C)**

REVISION HISTORY

rev.	description	date
1.0	initial release	10/17/2019
1.01	added model CP144745325	11/10/2020

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

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