

SERIES: CP90H | **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

	input voltage ¹	input current ²	internal resistance ³	output Qmax ⁴		output ΔT max ⁵	
	max [Vdc]	max [A]	typ [$\Omega \pm 10\%$]	$T_h = 27^\circ\text{C}$ [W]	$T_h = 50^\circ\text{C}$ [W]	$T_h = 27^\circ\text{C}$ [$^\circ\text{C}$]	$T_h = 50^\circ\text{C}$ [$^\circ\text{C}$]
CP902015343H	3.6	9.0	0.3±0.05	19.2	22.2	68	75
CP9040335H ⁶	15.4	9.0	1.29	79	92	70	77
CP90626257 ⁶	15.4	9.0	1.31	79	92	70	77

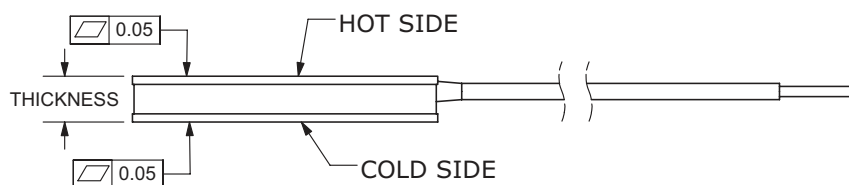
- Notes:
1. Maximum voltage at ΔT max and $T_h = 27^\circ\text{C}$
 2. Maximum current to achieve ΔT max
 3. Measured by AC 4-terminal method at 25°C
 4. Maximum heat absorbed at cold side occurs at I_{max} , V_{max} , and $\Delta T = 0^\circ\text{C}$
 5. Maximum temperature difference occurs at I_{max}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

SPECIFICATIONS

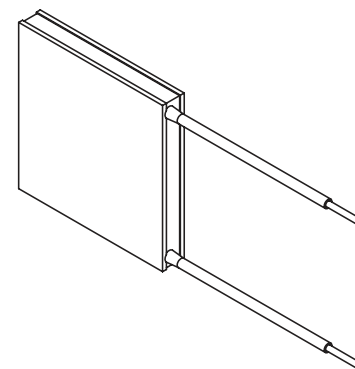
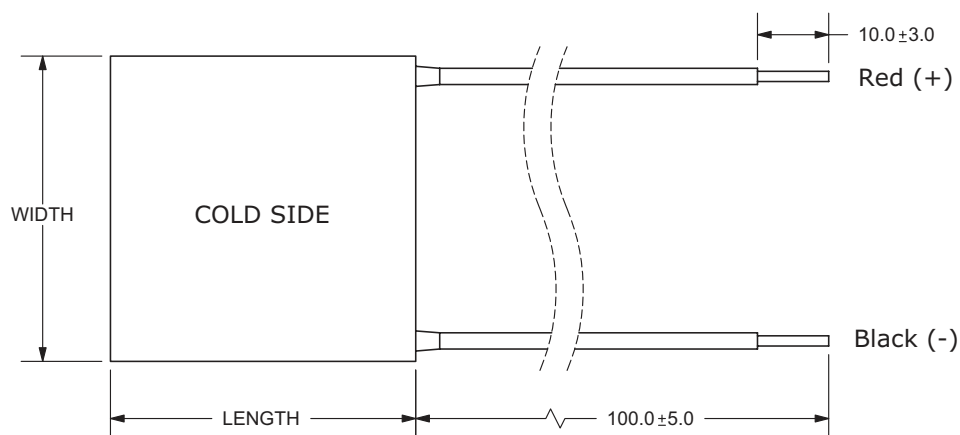
parameter	conditions/description	min	typ	max	units
solder melting temperature	connection between thermoelectric pairs	235			°C
assembly compression				1	MPa
RoHS	yes				

MECHANICAL DRAWING

units: mm

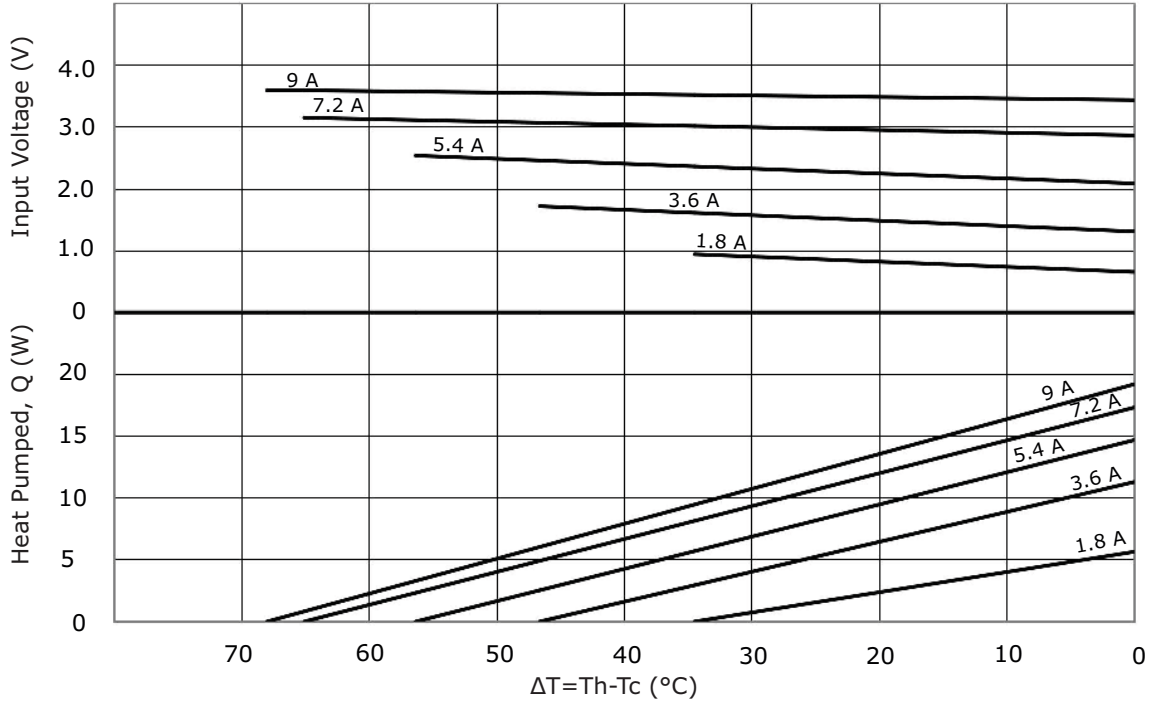


	MATERIAL	PLATING
ceramic plate	96% Al_2O_3	
wire leads (CP90626257)	18 AWG	tin
wire leads (all other models)	20 AWG	tin
sealer	silicon rubber 703 RTV (between cold and hot side plates)	
joint cover	silicon rubber 703 RTV	
marking	P/N & S/N printed on cold side surface	

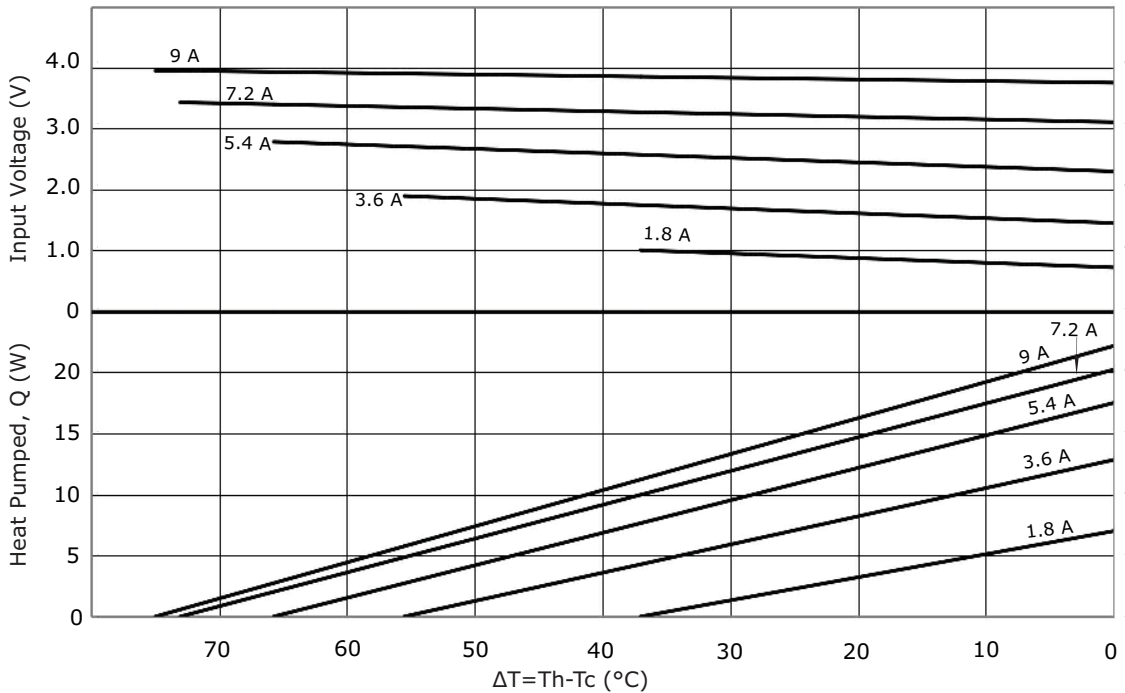


MODEL NO.	LENGTH (mm)	WIDTH (mm)	THICKNESS (mm)
CP902015343H	20 ±0.3	15 ±0.3	3.43 ±0.03
CP9040335H	40 ±0.3	40 ±0.3	3.35 ±0.025
CP90626257	62 ±0.3	62 ±0.3	5.7 ±0.05

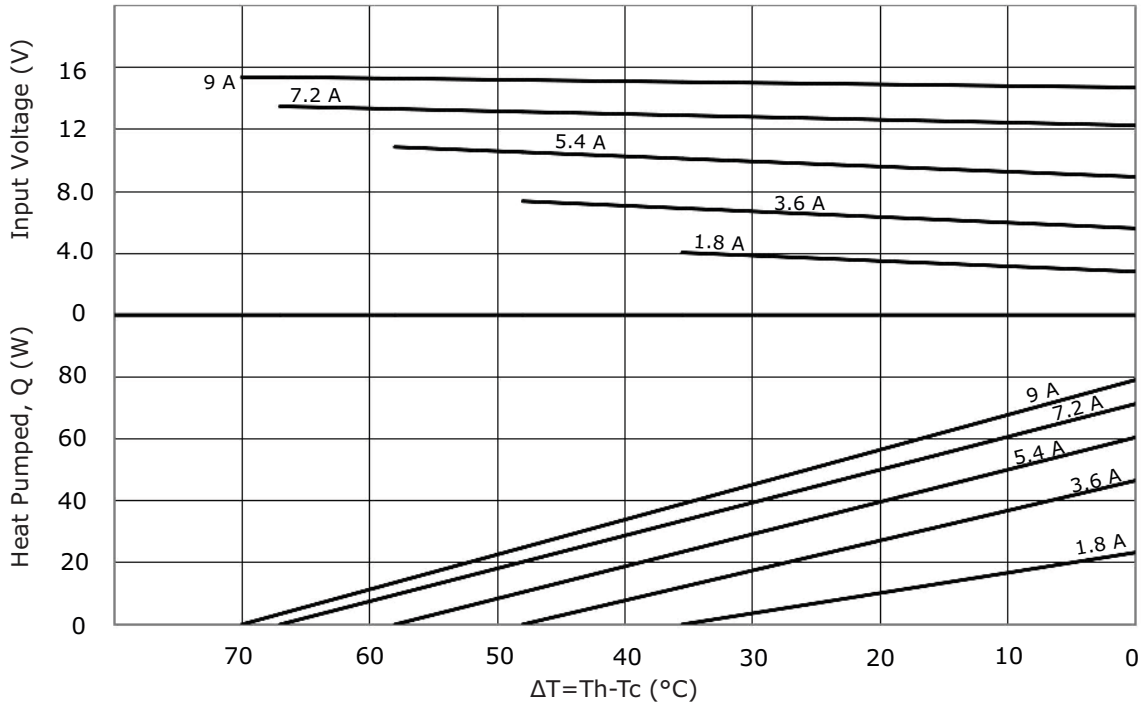
CP902015343H PERFORMANCE (Th=27°C)



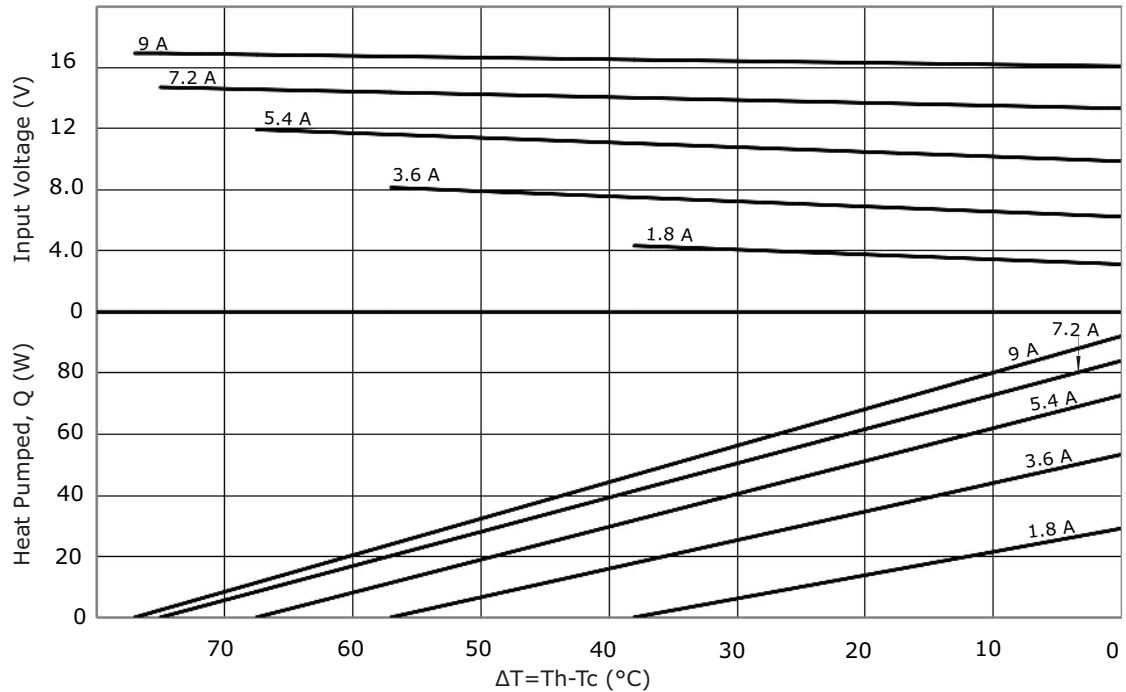
CP902015343H PERFORMANCE (Th=50°C)



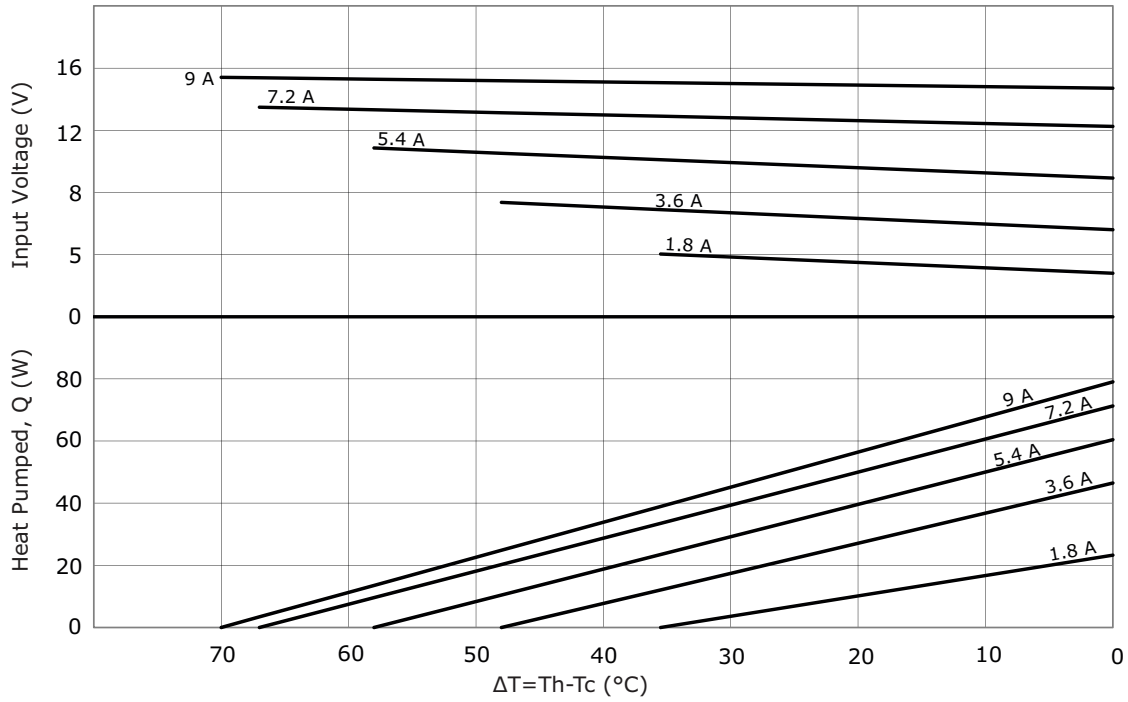
CP9040335H PERFORMANCE (Th=27°C)



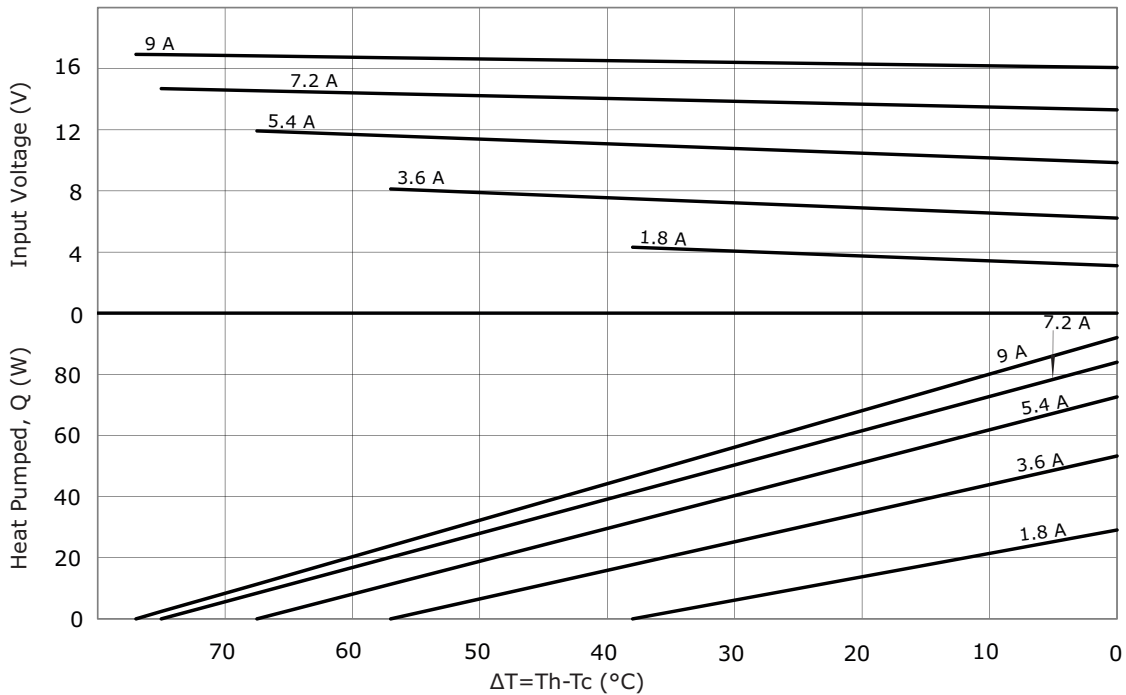
CP9040335H PERFORMANCE (Th=50°C)



CP90626257 PERFORMANCE (Th=27°C)



CP90626257 PERFORMANCE (Th=50°C)



REVISION HISTORY

rev.	description	date
1.0	initial release	10/16/2019
1.01	added models CP902015343H & CP9040335H	11/12/2020
1.02	logo, datasheet style update	08/05/2022

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



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