



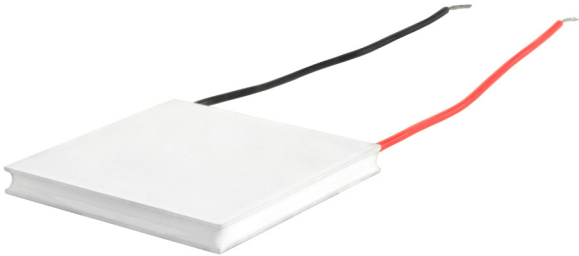
SERIES: CP45H

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DESCRIPTION: PELTIER MODULE

FEATURES

- arcTEC™ structure
- solid state device
- precise temperature control
- silent operation



MODEL

	input voltage ¹ max [Vdc]	input current ² max [A]	internal resistance ³ typ [Ω±10%]	output Qmax ⁴		output ΔTmax ⁵	
				T _h =27°C [W]	T _h =50°C [W]	T _h =27°C [°C]	T _h =50°C [°C]
CP454375	19.5	4.5	3.54	50.7	55.7	70	77
CP455535H	15.7	4.5	2.5	41	45	70	77

Notes:

1. Maximum voltage at ΔT max and T_h=27°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 ΔT=0°C

5. Maximum temperature difference occurs at I_{max}, V_{max}, and Q=0W (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

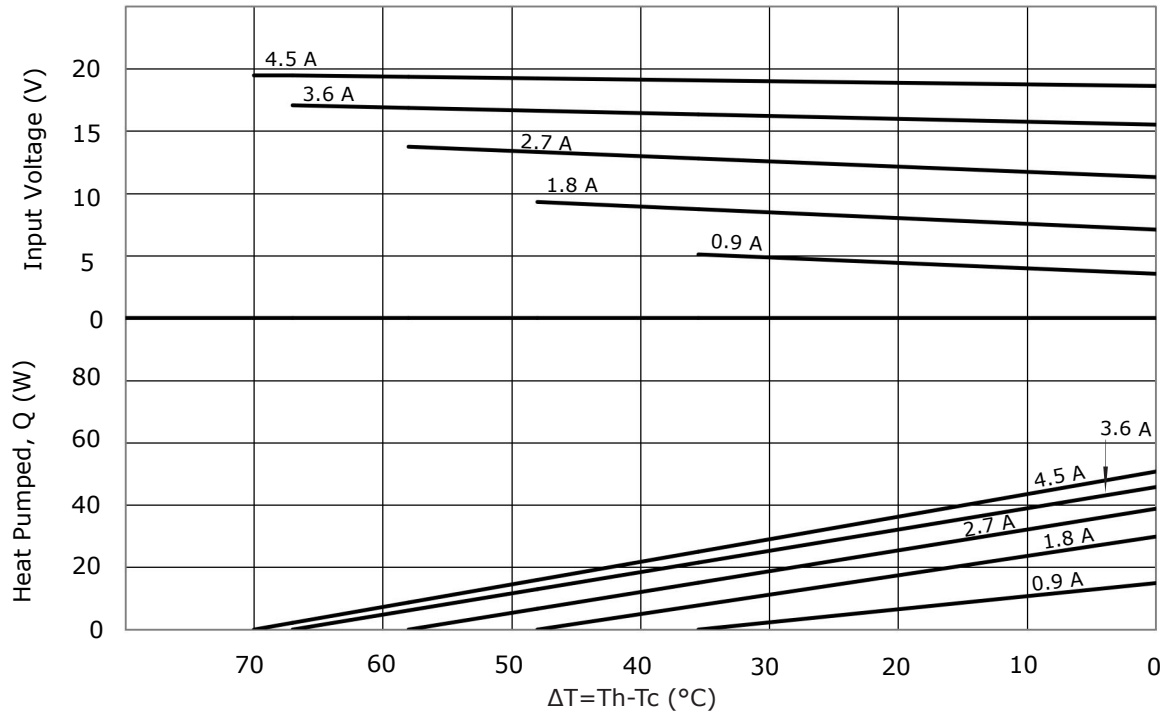
The top view shows a rectangular module with a thickness of 5.35 ± 0.1 mm. The top surface is labeled 'COLD SIDE' and the bottom surface is labeled 'HOT SIDE'. Both surfaces have a surface finish of 0.05 mm. The side view shows the module's profile with a width of 50 ± 0.3 mm and a length of 100.0 ± 5.0 mm. The wire leads are 10.0 ± 3.0 mm long and are labeled 'Red (+)' and 'Black (-)'.

	MATERIAL	PLATING
ceramic plate	96% AL ₂ O ₃	
wire leads	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	

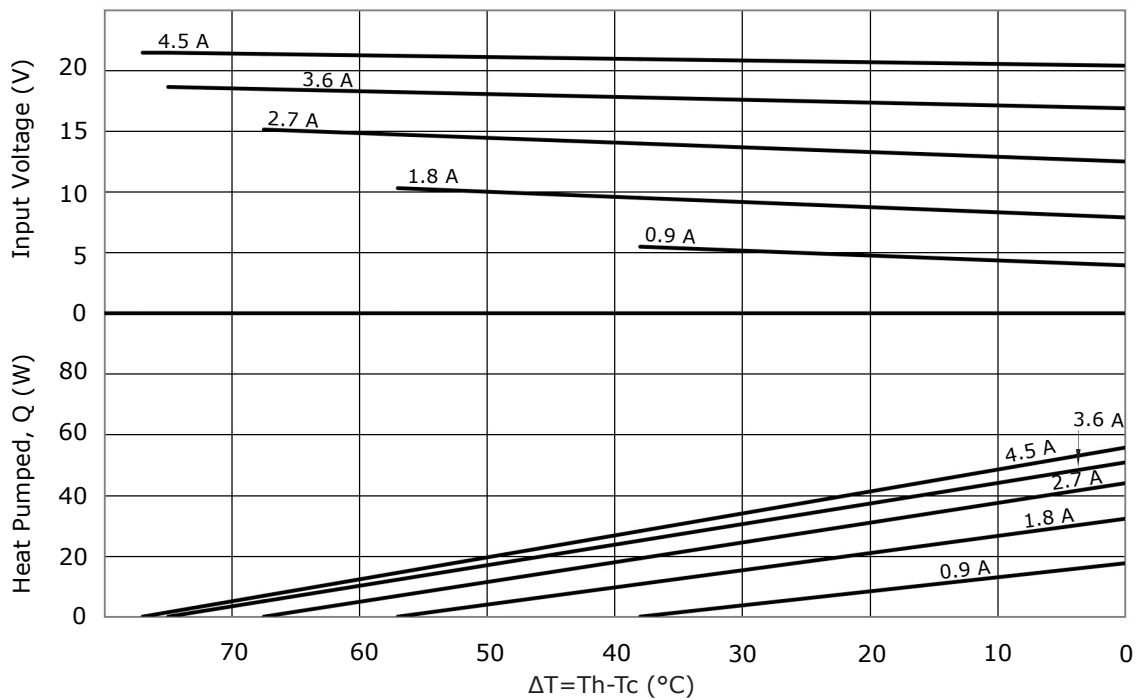
The top view shows a rectangular module with a width of 50 ± 0.3 mm and a length of 100.0 ± 5.0 mm. The wire leads are 10.0 ± 3.0 mm long and are labeled 'Red (+)' and 'Black (-)'. The side view shows the module's profile with a height of 50 ± 0.3 mm.

MODEL NO.	LENGTH [mm]	WIDTH [mm]	THICKNESS [mm]
CP454375	40 ± 0.3	40 ± 0.3	3.75 ± 0.1
CP455535H	50 ± 0.3	50 ± 0.3	5.35 ± 0.1

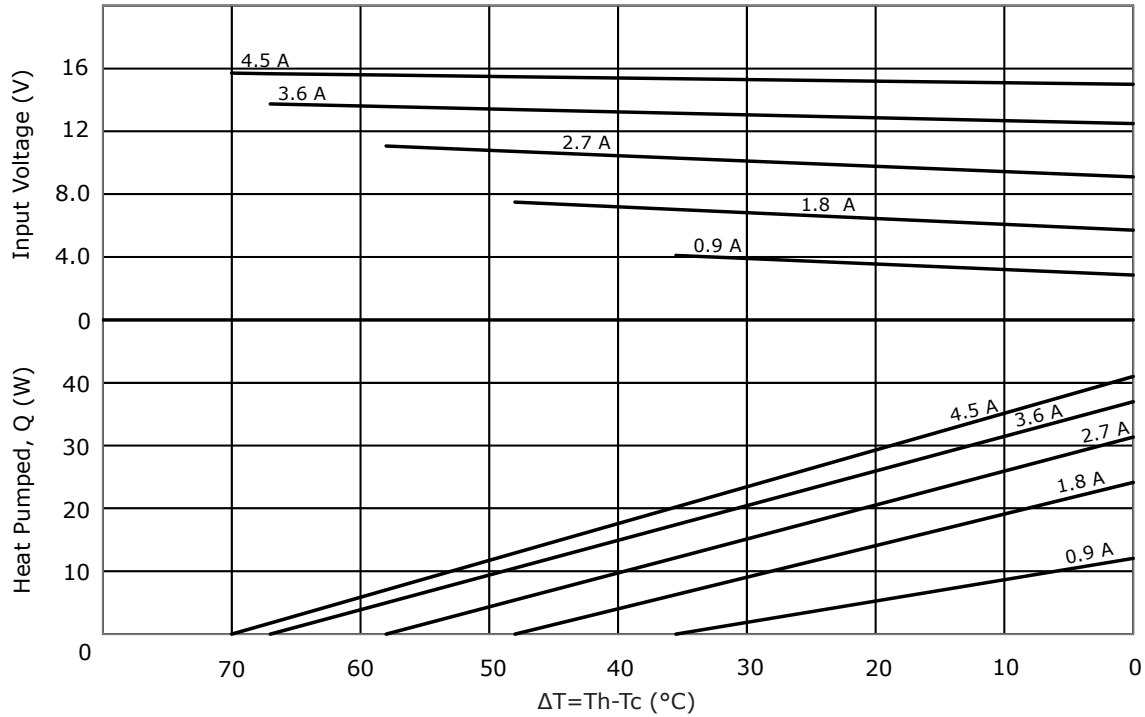
CP454375 PERFORMANCE (Th=27°C)



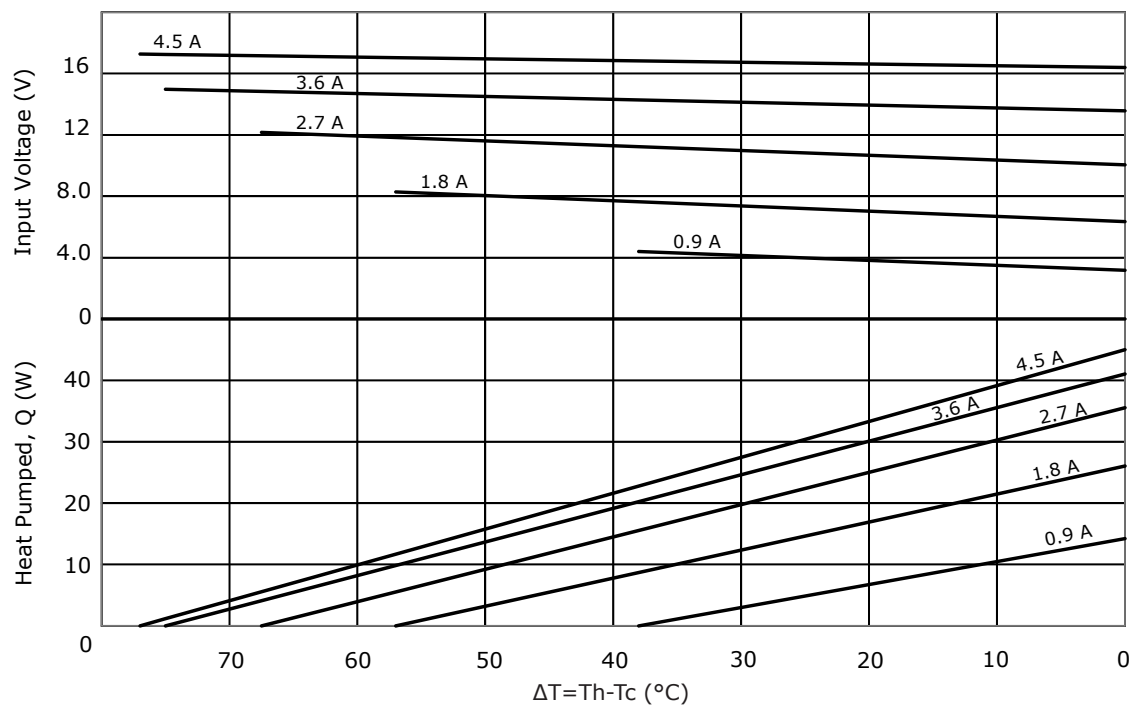
CP454375 PERFORMANCE (Th=50°C)



CP45535H PERFORMANCE (Th=27°C)



CP45535H PERFORMANCE (Th=50°C)



REVISION HISTORY

rev.	description	date
1.0	initial release	05/21/2018
1.01	added model CP454375, brand update	10/16/2019
1.02	logo, datasheet style update	08/05/2022
1.03	CUI Devices rebranded to Same Sky	09/12/2024

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



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

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