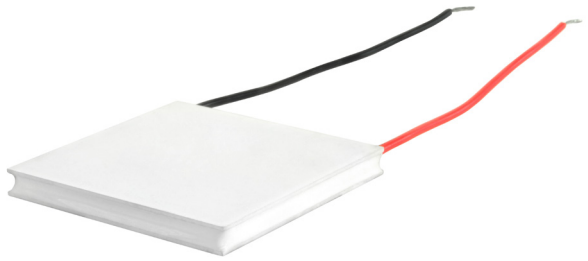
CUI DEVICES

SERIES: CP45H | DESCRIPTION: PELTIER MODULE

FEATURES

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



RoHS

MODEL	input voltage[1] max (Vdc)	input current[2] max (A)	internal resistance[3] typ (Ω±10%)	output Qmax[4] T_h=27°C (W)	output Qmax[4] T_h=50°C (W)	output ΔTmax[5] T_h=27°C (°C)	output ΔTmax[5] 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

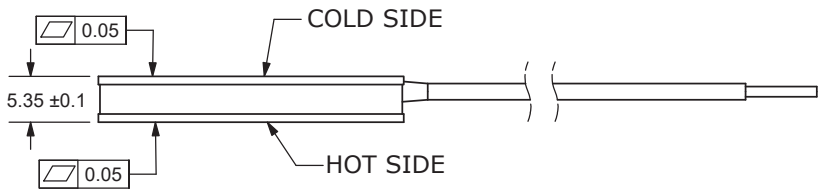
Notes:
1. Maximum voltage at ΔT max and T_h=27°C
2. Maximum current to achieve ΔT max
3. Measured by AC 4-terminal method at 25°C
4. Maximum heat absorbed at cold side occurs at I_{max}, V_{max}, and ΔT=0°C
5. Maximum temperature difference occurs at I_{max}, V_{max}, and Q=0W (ΔT max measured in a vacuum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

SPECIFICATIONS

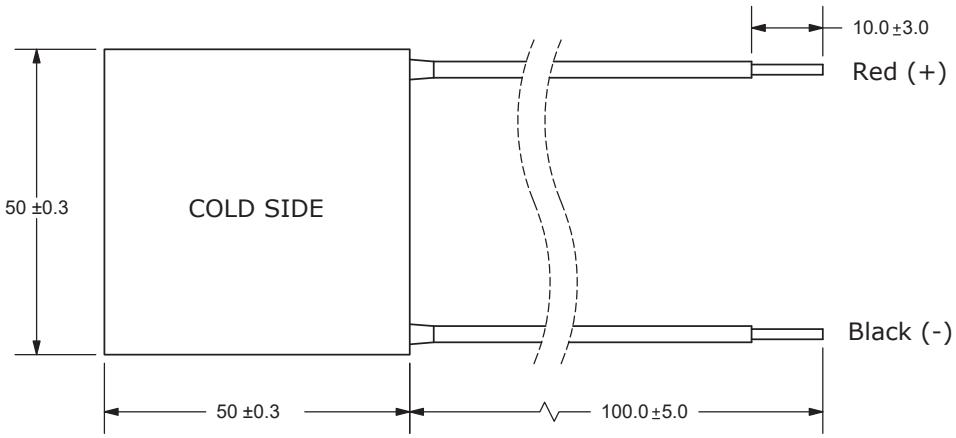
parameter	conditions/description	min	typ	max	units
solder melting temperature	connection between thermoelectric pairs	235			°C
assembly compression				1	MPa
RoHS	yes				

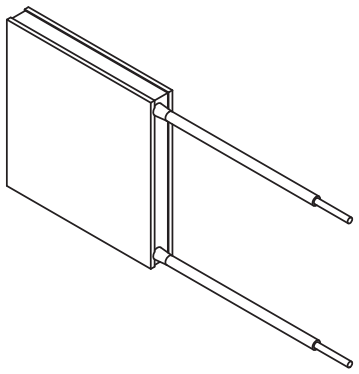
MECHANICAL DRAWING

units: mm



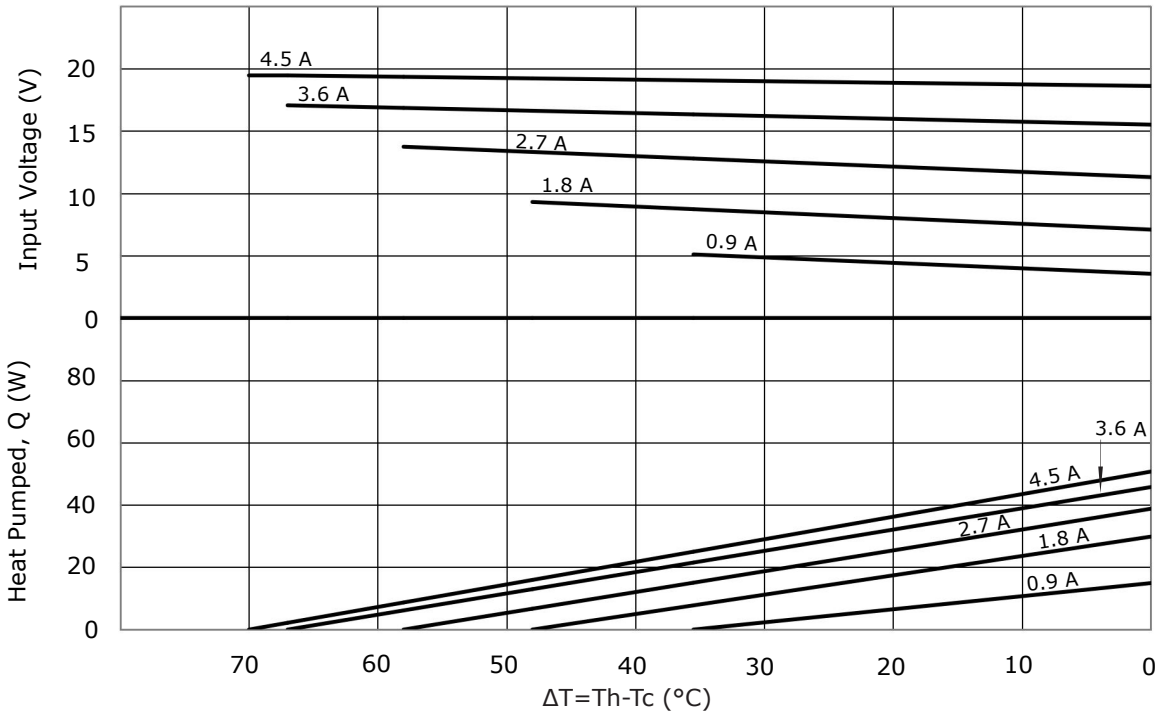
	MATERIAL	PLATING
ceramic plate	96% AL_2O_3	
wire leads	20 AWG	tin
sealer	silicon rubber 703 RTV (between cold and hot side plates)	
joint cover	silicon rubber 703 RTV	
marking	P/N & S/N printed on cold side surface	



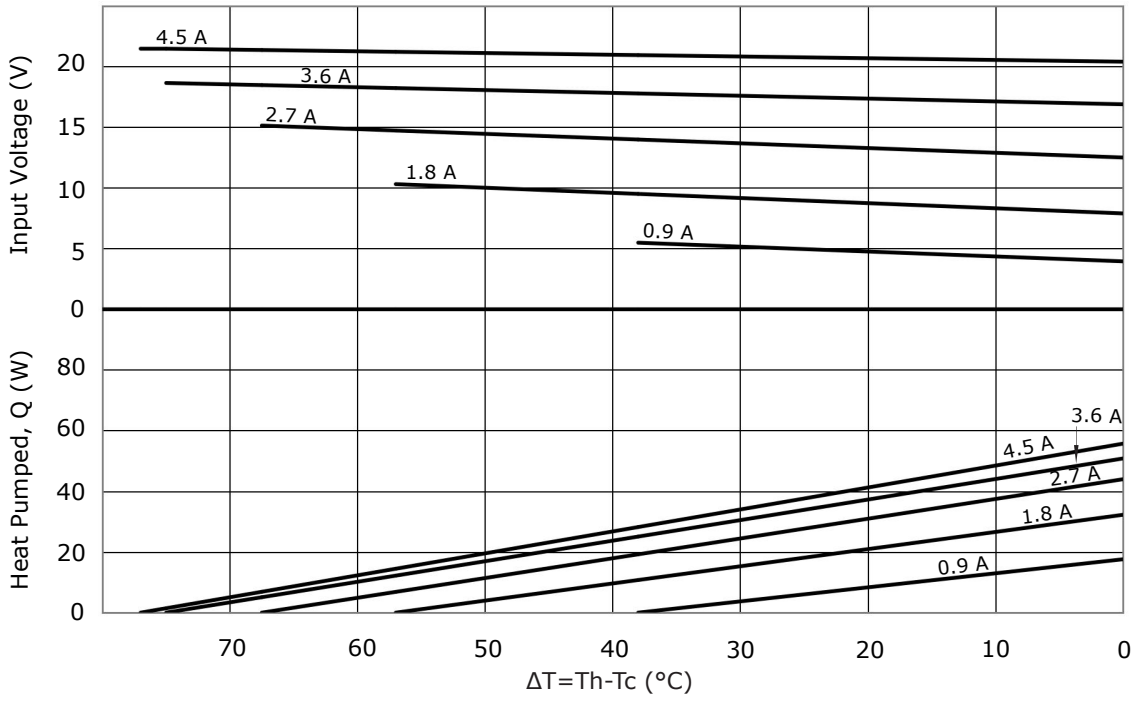


MODEL NO.	LENGTH (mm)	WIDTH (mm)	THICKNESS (mm)
CP454375	40 ±0.3	40 ±0.3	3.75 ±0.1
CP455535H	50 ±0.3	50 ±0.3	5.35 ±0.1

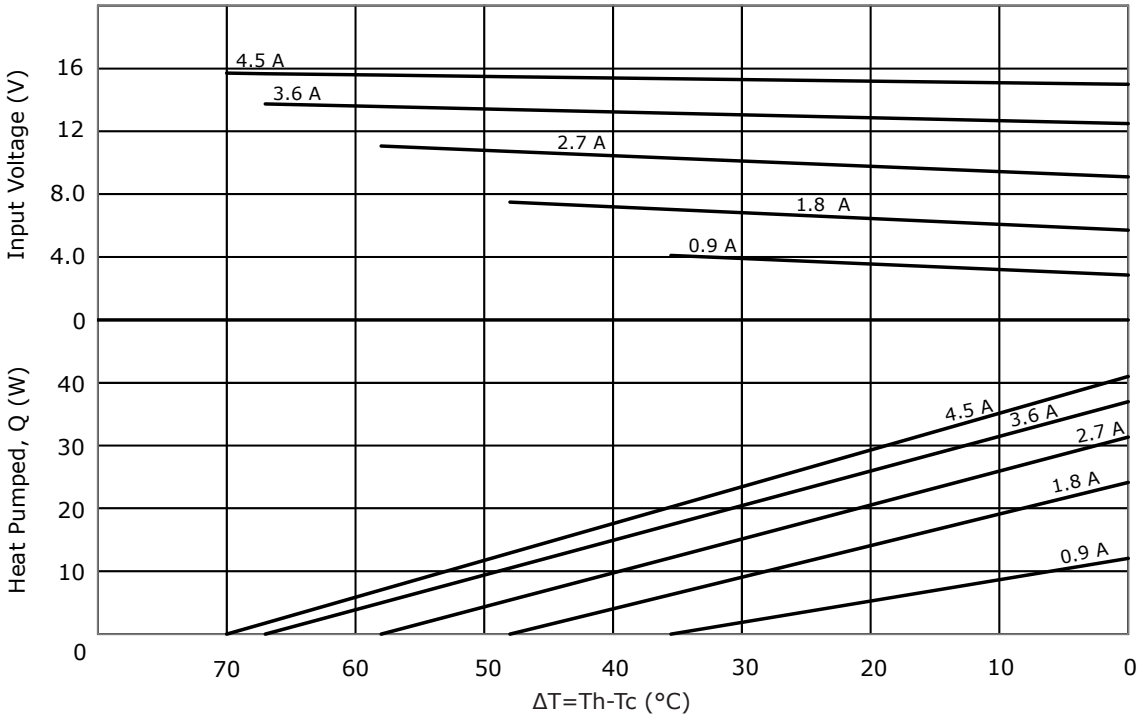
CP454375 PERFORMANCE (Th=27°C)



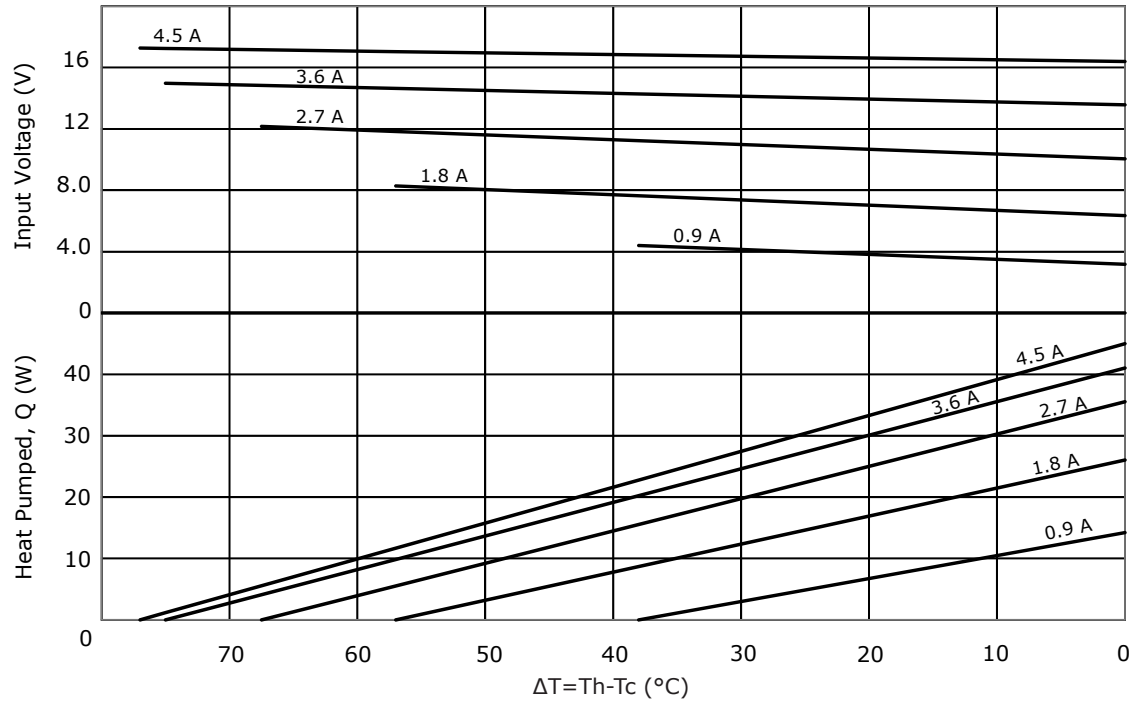
CP454375 PERFORMANCE (Th=50°C)



CP455535H PERFORMANCE (Th=27°C)



CP455535H 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

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