Additional Resources: Product Page | 3D Model

**CUI** DEVICES

date 10/16/2019

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**SERIES:** CP45H | **DESCRIPTION:** PELTIER MODULE

#### **FEATURES**

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





MODEL	input voltage¹	input current²	internal resistance <sup>3</sup>	output Qmax⁴			tput nax⁵
	max (Vdc)	max (A)	typ $(\Omega \pm 10\%)$	<b>T</b> <sub>h</sub> <b>=27°C</b> (W)	T <sub>h</sub> =50°C (W)	<b>T<sub>h</sub>=27°C</b> (°C)	T <sub>h</sub> =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  $\Delta T$  max and  $T_h = 27$ °C

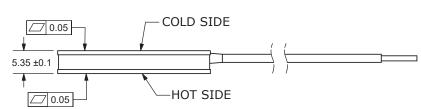
- Maximum voltage at Δ1 Hax and 1<sub>h</sub>-27 C
  Maximum current to achieve ΔT max
  Measured by AC 4-terminal method at 25°C
  Maximum heat absorbed at cold side occurs at I<sub>max</sub>, V<sub>max</sub>, and ΔT=0°C
  Maximum temperature difference occurs at I<sub>max</sub>, V<sub>max</sub>, and Q=0W (ΔT max measured in a vacuum at 1.3 Pa)

#### **SPECIFICATIONS**

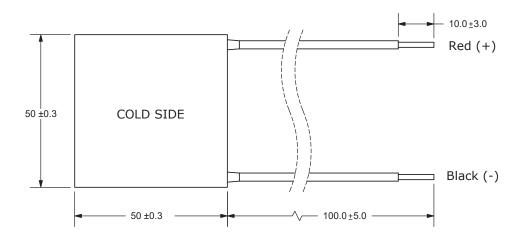
parameter	conditions/description	min	typ	max	units
solder melting temperature	connection between thermoelectric pairs	235			°C
assembly compression				1	MPa
RoHS	yes				

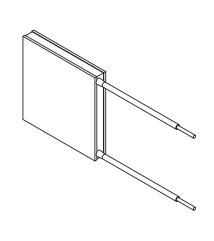
#### **MECHANICAL DRAWING**





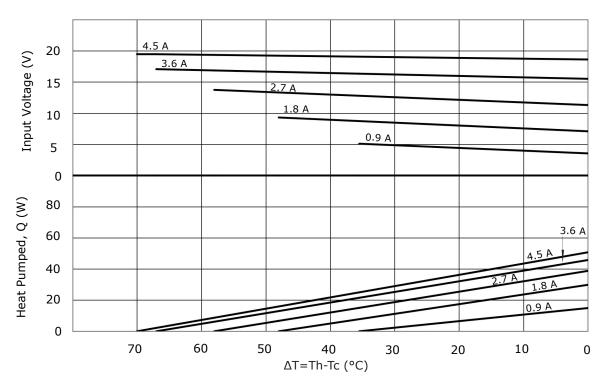
	MATERIAL	PLATING	
ceramic plate	96% AL <sub>2</sub> O <sub>3</sub>		
wire leads	20 AWG	tin	
sealer	silicon rubber 703 RTV (between cold and hot side plates)		
joint cover	silicon rubber 703 RTV		
marking	P/N & S/N printed on cold side surface		



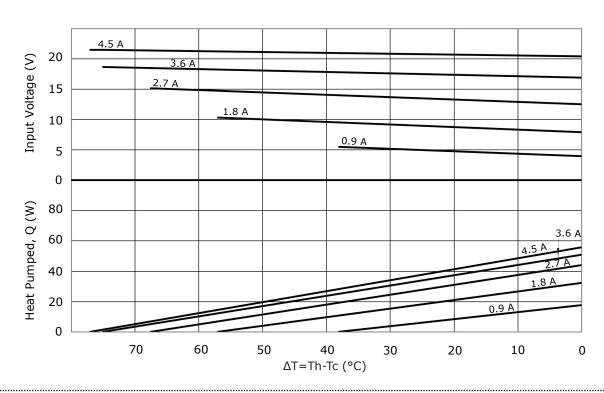


MODEL NO.	LENGTH (mm)	WIDTH (mm)	THICKNESS (mm)
CP454375	40 ±0.3	40 ±0.3	3.75 ±0.1
CP455535H	50 ±0.3	50 ±0.3	5.35 ±0.1

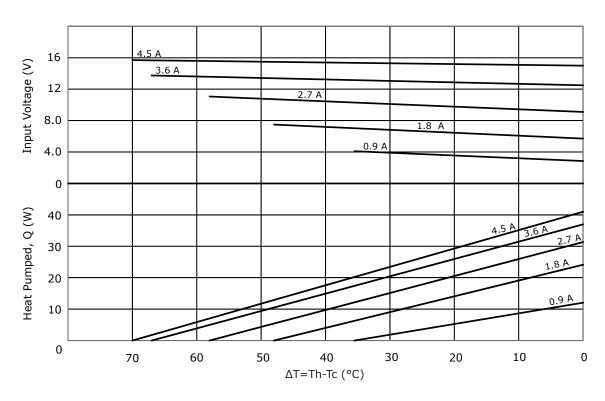
## CP454375 PERFORMANCE (Th=27°C)



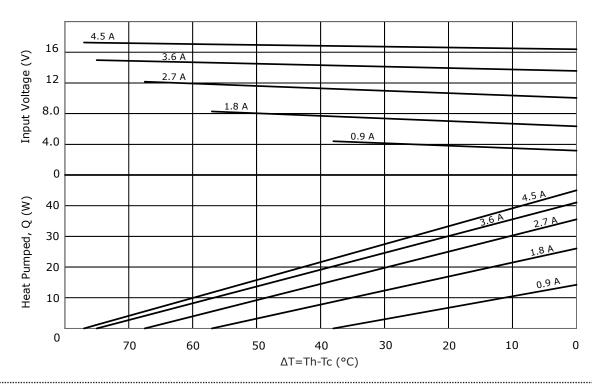
### CP454375 PERFORMANCE (Th=50°C)



## CP455535H PERFORMANCE (Th=27°C)



### CP455535H PERFORMANCE (Th=50°C)



Additional Resources: Product Page | 3D Model

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#### **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.

# **CUI** DEVICES

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