

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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date 05/21/2018

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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 resistance³	output Qmax⁴			tput nax⁵
	<b>max</b> (Vdc)	max (A)	$ ext{typ} \ (\Omega \pm 10\%)$	T <sub>h</sub> =27°C (W)	T <sub>h</sub> =50°C (W)	<b>T<sub>h</sub>=27°C</b> (°C)	T <sub>h</sub> =50°C (°C)
CP455535H	15.7	4.5	2.5	41	45	70	77

Notes:

- 1. Maximum voltage at  $\Delta T$  max and  $T_n$ =27°C 2. Maximum current to achieve  $\Delta T$  max 3. Measured by AC 4-terminal method at 25°C

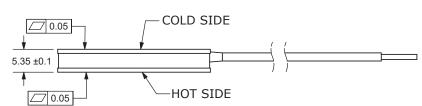
- 4. Maximum heat absorbed at cold side occurs at  $I_{max'}$   $V_{max'}$  and  $\Delta T=0$ °C 5. Maximum temperature difference occurs at  $I_{max'}$   $V_{max'}$  and Q=0W ( $\Delta T$  max measured in a vacuum at 1.3 Pa)

### **SPECIFICATIONS**

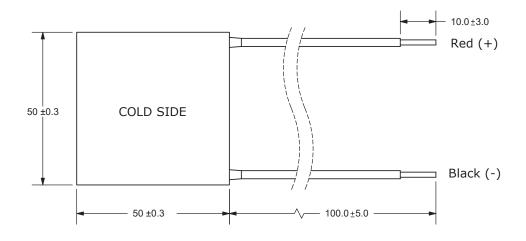
parameter	conditions/description	min	typ	max	units
solder melting temperature	connection between thermoelectric pairs	235			°C
assembly compression				1	MPa
hot side plate				100	°C
RoHS	2011/65/EU				

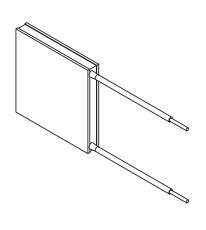
### **MECHANICAL DRAWING**

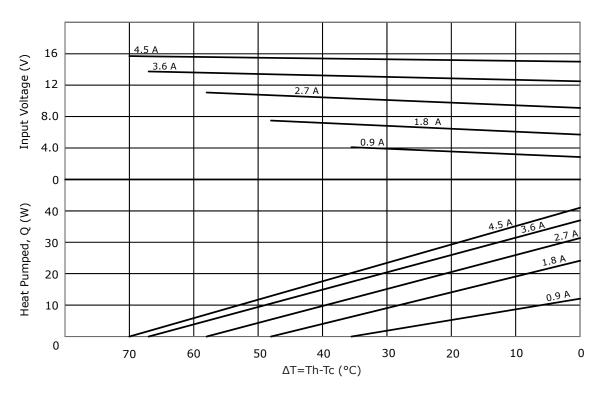




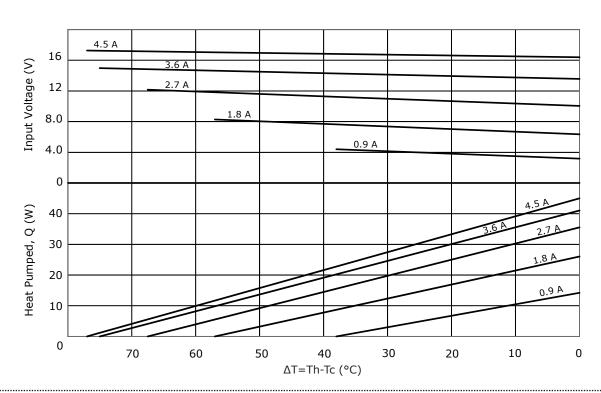
	MATERIAL	PLATING	
ceramic plate	96% AL <sub>2</sub> O <sub>3</sub>		
wire leads	20 AWG	tin	
sealer	silicon rubber 703 RTV (between cold and hot side plates)		
joint cover	silicon rubber 703 RTV		
marking	P/N & S/N printed on cold side surface		







## PERFORMANCE (Th=50°C)



#### **REVISION HISTORY**

rev.	description	date
1.0	initial release	05/21/2018

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



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

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