

date 10/28/2019

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SERIES: CP125 **DESCRIPTION: PELTIER MODULE** 

#### **FEATURES**

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





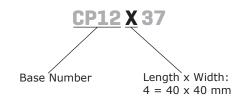
MODEL	input	input	output		output	
	voltage¹	current²	Qmax³		∆Tmax⁴	
	max	max	T <sub>h</sub> =27°C	T <sub>h</sub> =50°C	<b>T<sub>h</sub>=27°C</b>	<b>T</b> <sub>h</sub> <b>=50°C</b>
	(Vdc)	(A)	(W)	(W)	(°C)	(°C)
CP12437	15.4	12.5	110	121	68	75

Notes:

- 1. Maximum voltage at  $\Delta T$  max and  $T_{\rm h}{=}27^{\rm o}C$  2. Maximum current to achieve  $\Delta T$  max

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

### **PART NUMBER KEY**



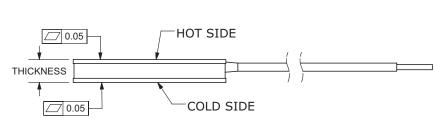
units: mm

### **SPECIFICATIONS**

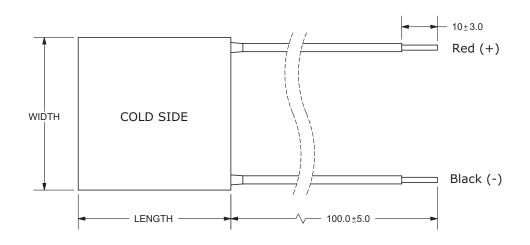
parameter	conditions/description	min	typ	max	units
internal resistance <sup>1</sup>		0.855	0.95	1.045	Ω
solder melting temperature	connection between thermoelectric pairs	235			°C
assembly compression				1	MPa
hot side plate				80	°C
RoHS	yes				

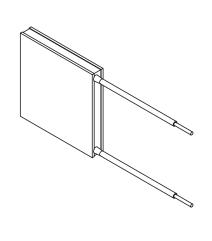
1. Measured by AC 4-terminal method at 25°C

### **MECHANICAL DRAWING**



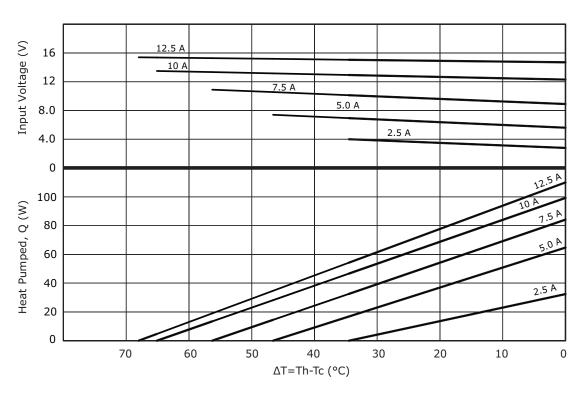
	MATERIAL	PLATING		
ceramic plate	96% AL <sub>2</sub> O <sub>3</sub>			
wire leads	18 AWG	tin		
sealer	silicon rubber 703 RTV (between cold and hot side plates)			
joint cover	silicon rubber 703 RTV			
marking	P/N & S/N print surface	P/N & S/N printed on cold side surface		



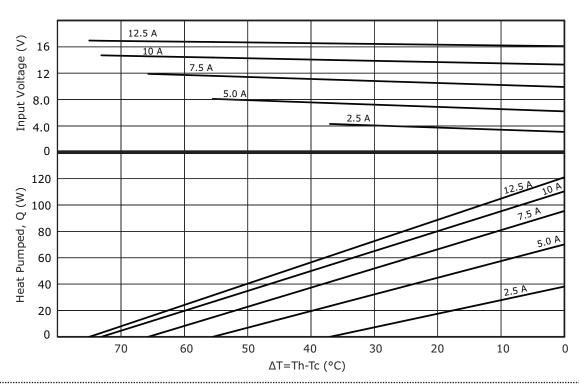


MODEL NO.	LENGTH (mm)	WIDTH (mm)	THICKNESS (mm)	
CP12437	40 ±0.3	40 ±0.3	3.7 ±0.1	

# PERFORMANCE (Th=27°C)



## PERFORMANCE (Th=50°C)



#### **REVISION HISTORY**

rev.	description	date	
1.0	initial release	09/08/2016	
1.01	changed to arcTEC™ structure	12/01/2017	
1.02	brand update	10/28/2019	

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

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