

date 08/05/2022

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# SERIES: CP120 | DESCRIPTION: PELTIER MODULE

#### **FEATURES**

- arcTEC™ structure
- enhanced reliability for high thermal cycling
- superior thermal performance
- silicon sealed
- wide ∆T max
- precise temperature control
- solid state construction





MODEL	input	input	internal	output		output	
	voltage¹	current²	resistance³	Qmax⁴		∆Tmax⁵	
	max	max	<b>typ</b>	T <sub>h</sub> =27°C	T <sub>h</sub> =50°C	<b>T<sub>h</sub>=27°C</b>	<b>T<sub>h</sub>=50°C</b>
	(Vdc)	[A]	[Ω±10%]	(W)	(W)	(°C)	(°C)
CP124159365	17	12	1.1	121	135	68	75

Notes:

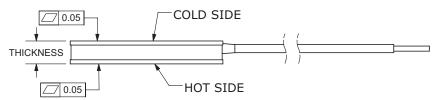
- 1. Maximum voltage at  $\Delta T$  max and  $T_h$ =27°C 2. Maximum current to achieve  $\Delta T$  max
- 3. Measured by AC 4-terminal method at 25°C
- 4. Maximum heat absorbed at cold side occurs at  $I_{max}$ ,  $V_{max}$ , and  $\Delta T=0^{\circ}C$ 5. Maximum temperature difference occurs at  $I_{max}$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

## **SPECIFICATIONS**

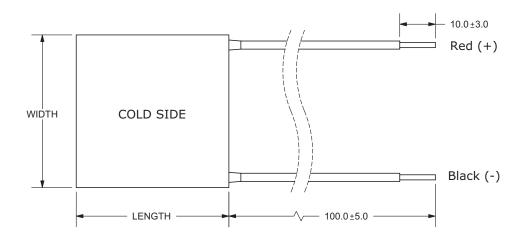
parameter	conditions/description	min	typ	max	units
solder melting temperature	connection between thermoelectric pairs	235			°C
assembly compression				1	MPa
RoHS	yes				

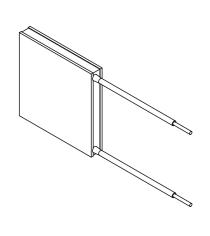
### **MECHANICAL DRAWING**





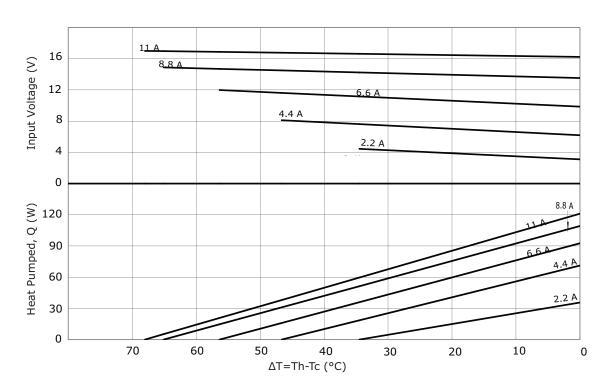
	MATERIAL	PLATING
ceramic plate	96% AL <sub>2</sub> O <sub>3</sub>	
wire leads	18 AWG	tin
sealer	silicon rubber 703 hot side plates)	RTV (between cold and
joint cover	silicon rubber 703	RTV
marking	P/N & S/N printed	on cold side surface



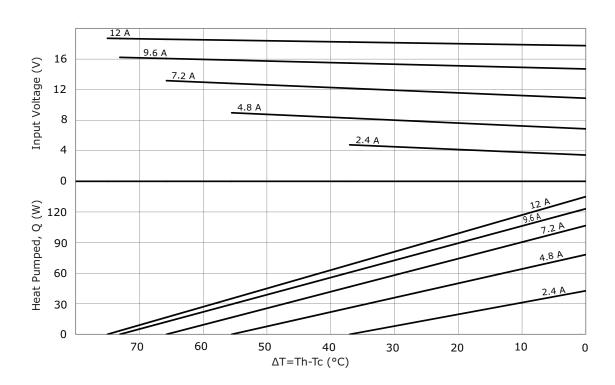


MODEL NO.	LENGTH	WIDTH	THICKNESS
	(mm)	(mm)	(mm)
CP124159365	41.5 ±0.3	59 ±0.3	3.65 ±0.1

# CP124159365 PERFORMANCE (Th=27°C)



## CP124159365 PERFORMANCE (Th=50°C)



### **REVISION HISTORY**

rev.	description	date
1.0	initial release	10/22/2019
1.01	logo, datasheet style update	08/05/2022

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



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

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