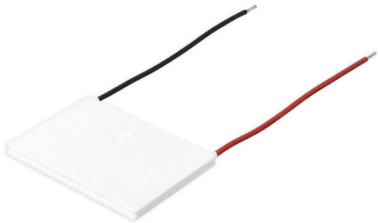




SERIES: CP120 | DESCRIPTION: PELTIER MODULE

FEATURES

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



MODEL

	input voltage ¹ max [Vdc]	input current ² max [A]	internal resistance ³ typ [$\Omega \pm 10\%$]	output Qmax ⁴		output ΔT max ⁵	
				T _h =27°C [W]	T _h =50°C [W]	T _h =27°C [°C]	T _h =50°C [°C]
CP124159385	17	12	1.1	121	135	68	75

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 $\Delta T=0^\circ\text{C}$

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

The diagram shows a cross-section of the Peltier module. It labels the 'COLD SIDE' and 'HOT SIDE'. The 'THICKNESS' is indicated with a dimension of 0.05 mm. Wire leads are shown extending from the module.

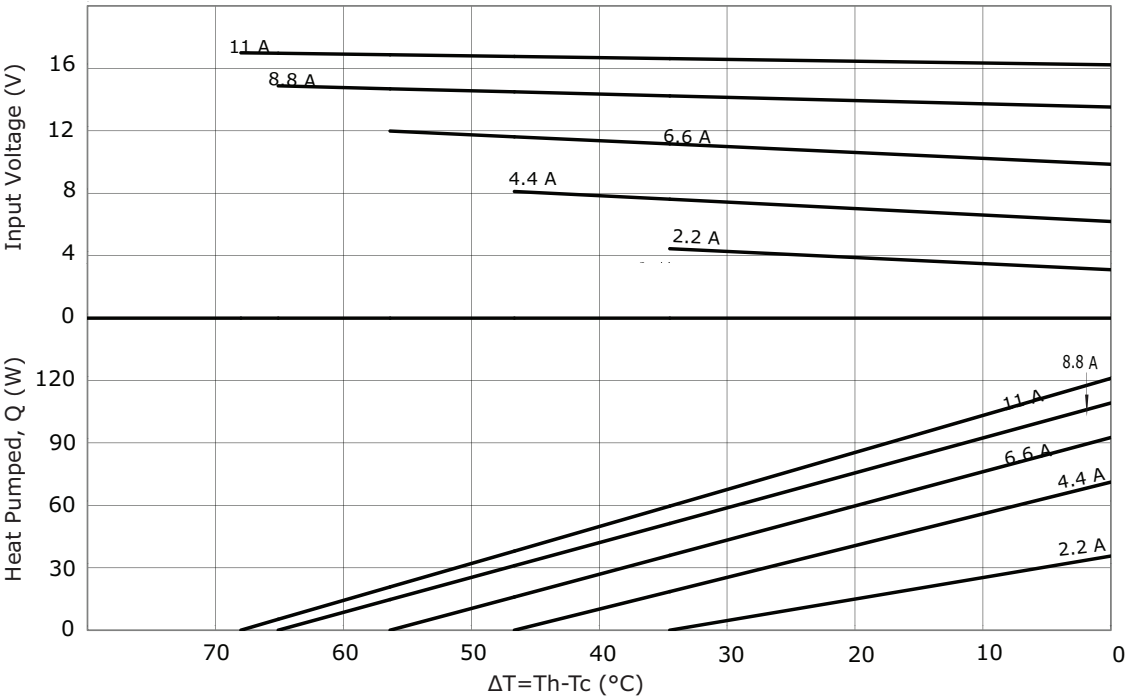
	MATERIAL	PLATING
ceramic plate	96% Al_2O_3	
wire leads	18 AWG	tin
sealer	silicon rubber 703 RTV (between cold and hot side plates)	
joint cover	silicon rubber 703 RTV	
marking	P/N & S/N printed on cold side surface	

The diagram shows the top view of the Peltier module. It labels the 'COLD SIDE'. Dimensions include 'WIDTH', 'LENGTH', and a distance of 10.0 ± 3.0 mm from the cold side to the wire leads. The wire leads are labeled 'Red (+)' and 'Black (-)'. A distance of 100.0 ± 5.0 mm is also indicated.

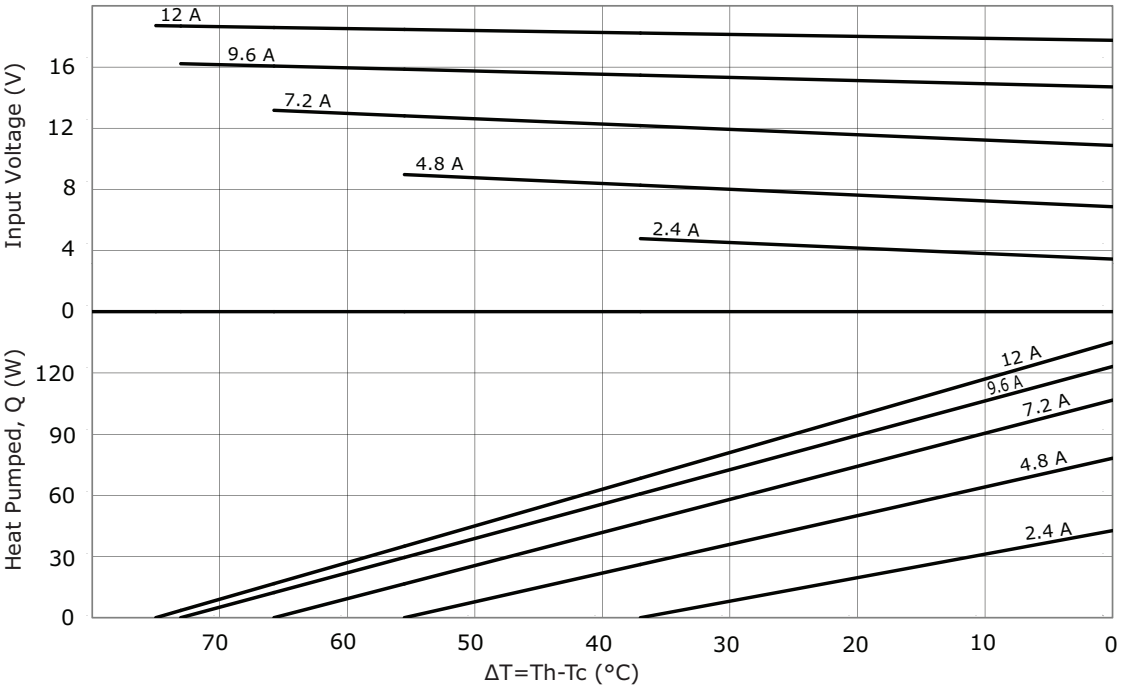
A 3D perspective view of the Peltier module, showing the cold side and the wire leads.

MODEL NO.	LENGTH (mm)	WIDTH (mm)	THICKNESS (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
1.02	CUI Devices rebranded to Same Sky	09/12/2024

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



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

Same Sky reserves the right to make changes to the product at any time without notice. Information provided by Same Sky is believed to be accurate and reliable. However, no responsibility is assumed by Same Sky for its use, nor for any infringements of patents or other rights of third parties which may result from its use.

Same Sky products are not authorized or warranted for use as critical components in equipment that requires an extremely high level of reliability. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

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