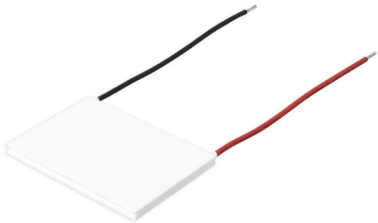




SERIES: CP120 | DESCRIPTION: PELTIER MODULE

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 module. The top surface is labeled 'COLD SIDE' and the bottom surface is labeled 'HOT SIDE'. Two dimension lines indicate a thickness of 0.05 mm on both the top and bottom surfaces. The central part of the module is shown with a break symbol, indicating it is longer than depicted.

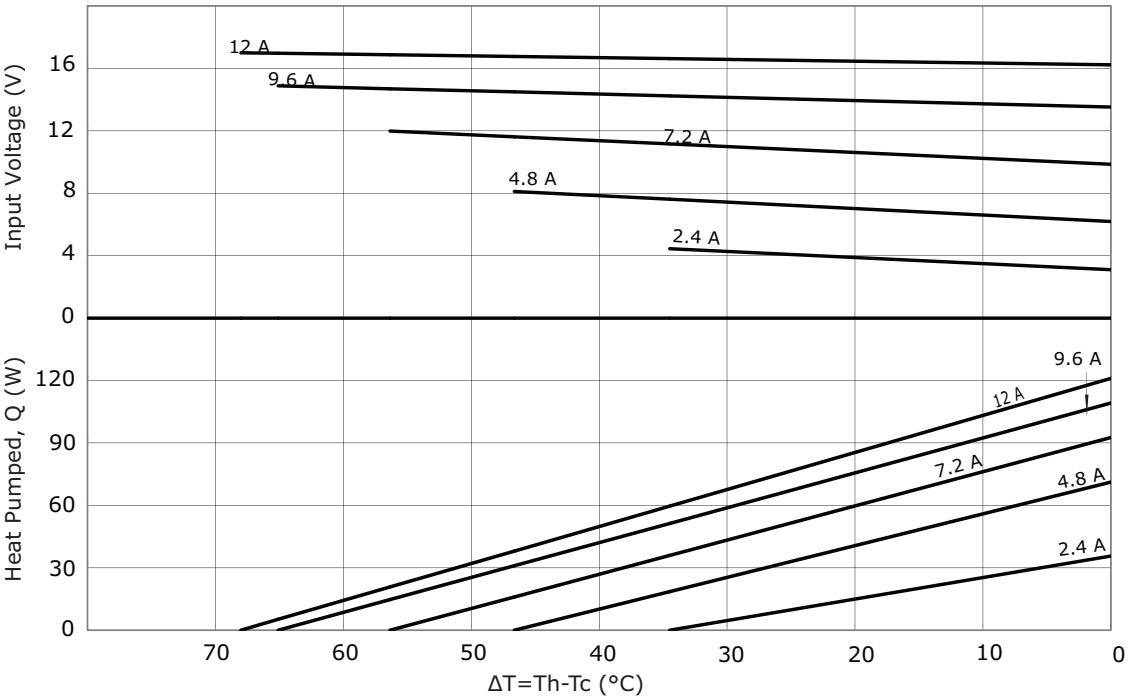
	MATERIAL	PLATING
ceramic plate	96% Al_2O_3	
wire leads	18 AWG	tin
sealer	silicon rubber 703 RTV (between cold and hot side plates)	
joint cover	silicon rubber 703 RTV	
marking	P/N & S/N printed on cold side surface	

The diagram shows the top-down view of the module. The large rectangular area is labeled 'COLD SIDE'. Dimensions include 'WIDTH' for the main body, 'LENGTH' for the main body, and a total length of 100.0 ± 5.0 mm. The wire leads are shown extending from the right side, with a length of 10.0 ± 3.0 mm. The top lead is labeled 'Red (+)' and the bottom lead is labeled 'Black (-)'. A break symbol is used to indicate the module is longer than shown.

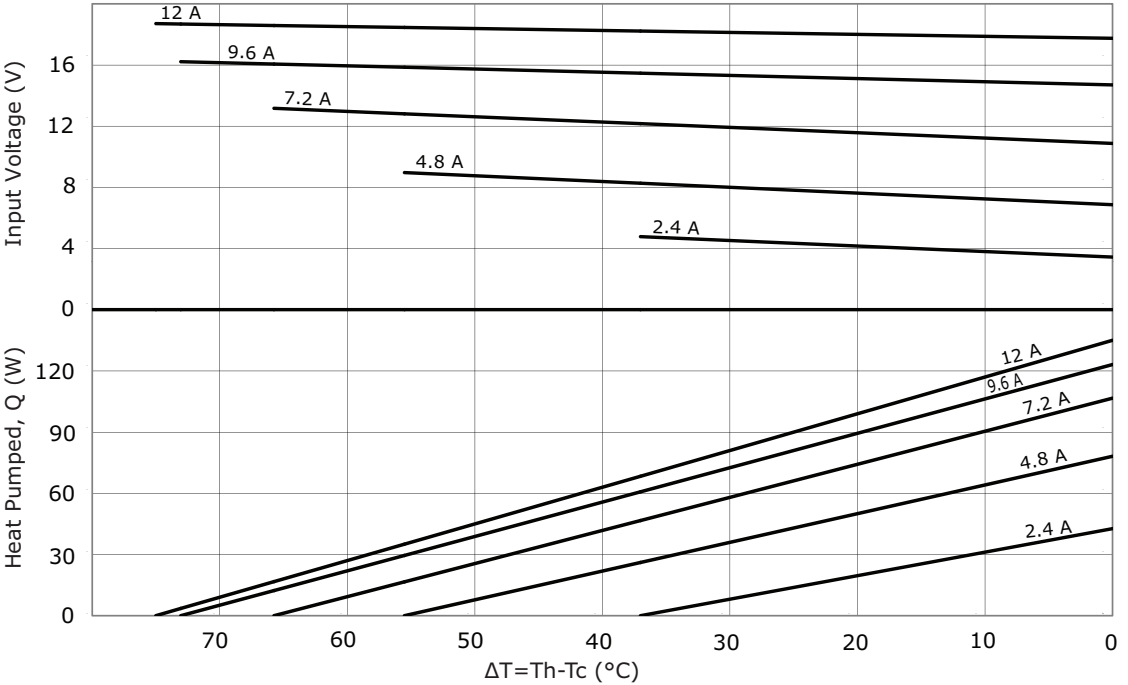
A 3D perspective view of the module, showing its rectangular shape and the wire leads extending from one side.

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
1.03	updated datasheet	06/16/2025

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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