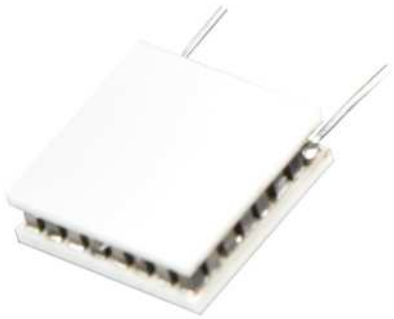
CUI Devices is now Same Sky! Learn More

SERIES: CP18-M | DESCRIPTION: PELTIER MODULE

FEATURES

- micro size (less than 10 x 10 mm)
- wide ΔT max
- Qmax of 4.2 W
- Au plating available, suitable for soldering
- precise temperature control
- solid state construction



RoHS

MODEL

	input voltage[1] max (Vdc)	input current[2] max (A)	internal resistance[3] typ (Ω±10%)	output Qmax[4] T_h=27°C (W)	output Qmax[4] T_h=50°C (W)	output ΔTmax[5] T_h=27°C (°C)	output ΔTmax[5] T_h=50°C (°C)
CP1881-222	3.8	1.8	1.62	3.8	4.2	70	77
CP1881-254P[6]	3.8	1.8	1.62	3.8	4.2	70	77

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 ΔT=0°C
5. Maximum temperature difference occurs at I_{max}, V_{max}, and Q=0W (ΔT max measured in a vacuum at 1.3 Pa)
6. Gold plating on both sides.

SOLDERABILITY[7]

parameter	conditions/description	min	typ	max	units
soldering to plates	soldering iron temperature			150	°C

Note:
7. Only for gold plated models. The solder that holds the peltier together melts at 235°C. Caution must taken to not leave the soldering iron in contact with the surface too long, or damage to the peltier could occur.

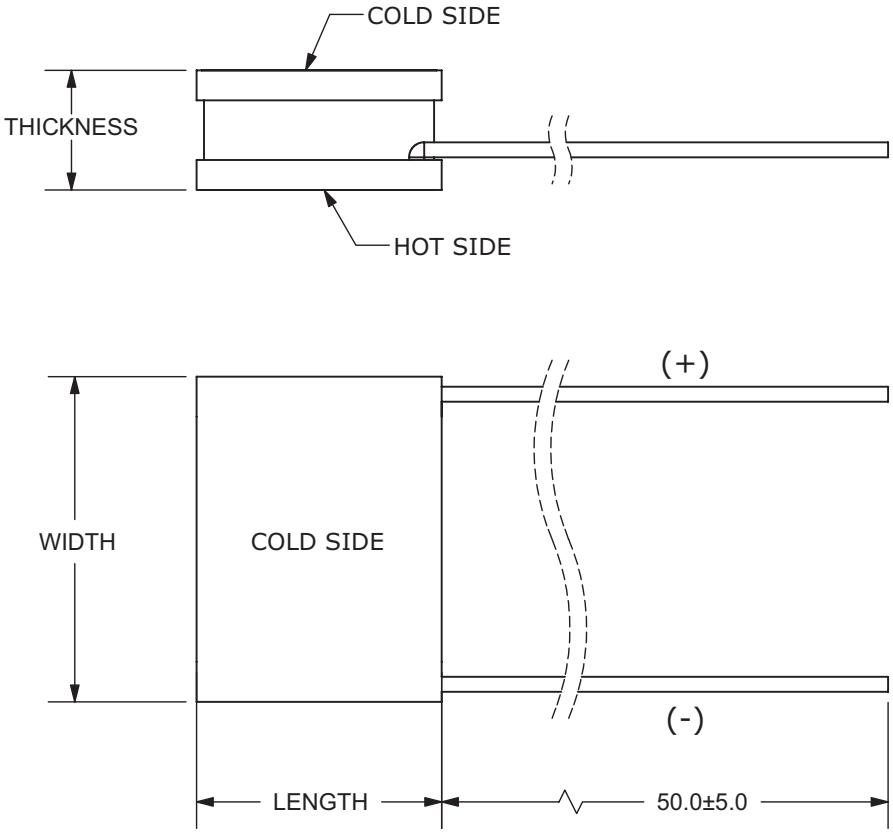
SPECIFICATIONS

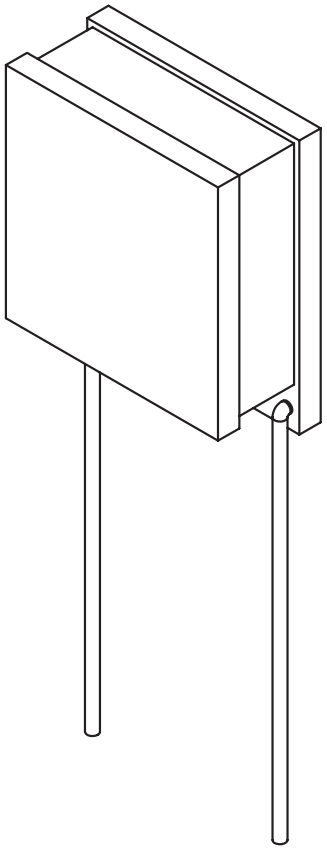
parameter	conditions/description	min	typ	max	units
solder melting temperature	connection between thermoelectric pairs	235			°C
assembly compression				0.8	MPa
RoHS	yes				

MECHANICAL DRAWING

units: mm

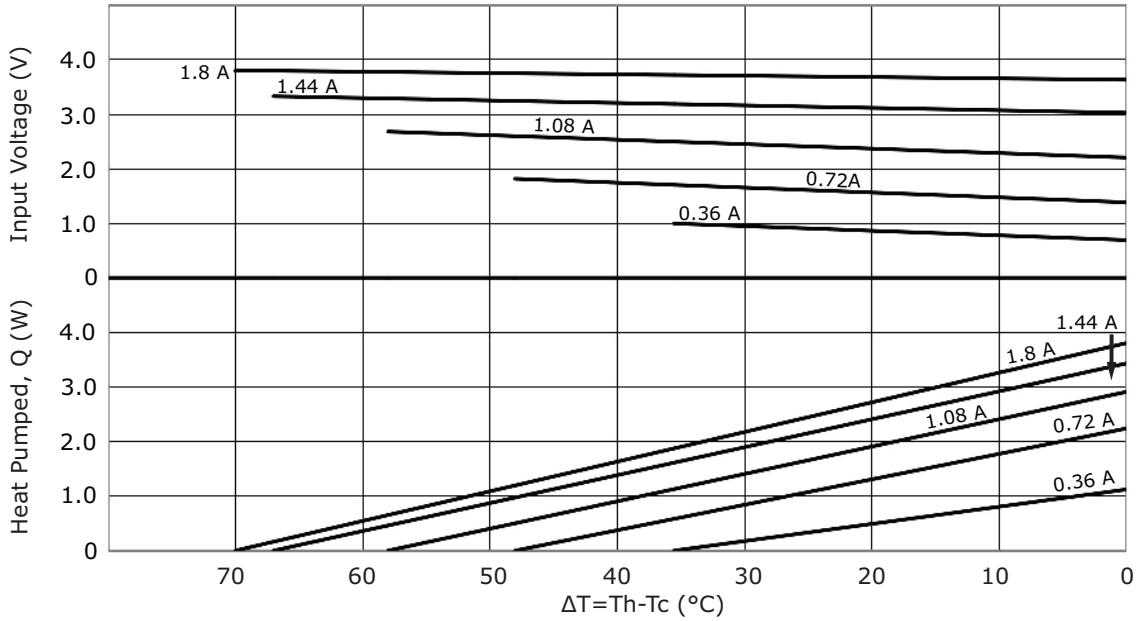
	MATERIAL	PLATING
ceramic plate	96% AL_2O_3	
wire leads	Ø0.25-0.3 mm annealed copper	tin
sealer	no sealing	
ceramic surface	Au plating on select models	



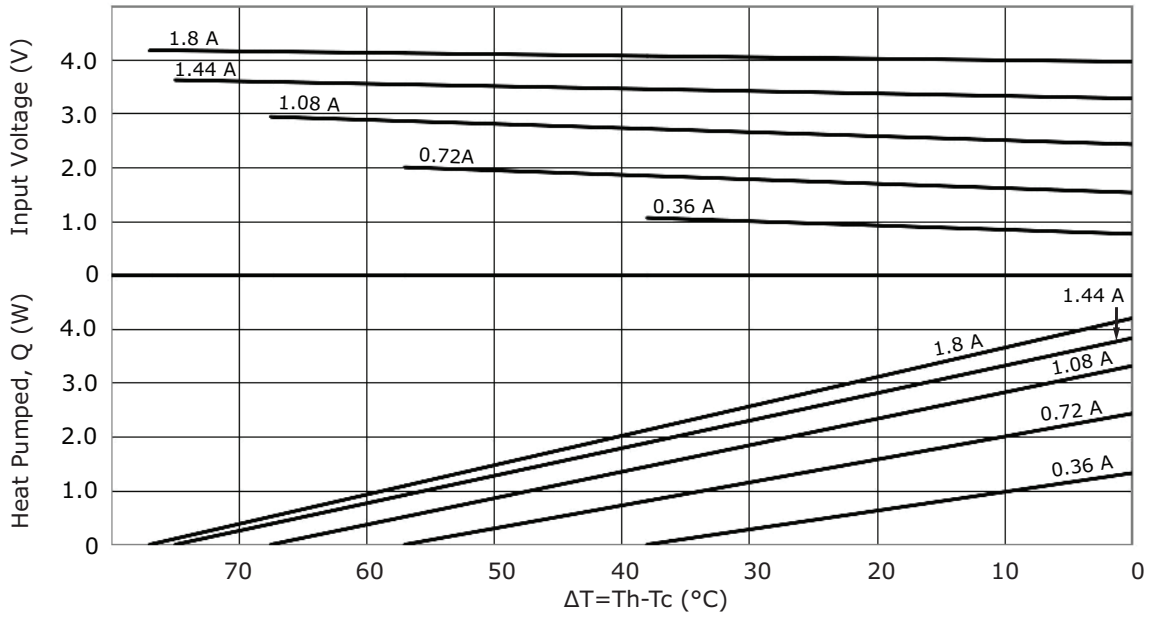


MODEL NO.	LENGTH [mm]	WIDTH [mm]	THICKNESS [mm]	GOLD PLATING HOT/ COLD SIDES
CP1881-222	8.1 ±0.3	8.1 ±0.3	2.22 ±0.15	NO
CP1881-254P	8.1 ±0.3	8.1 ±0.3	2.54 ±0.15	YES

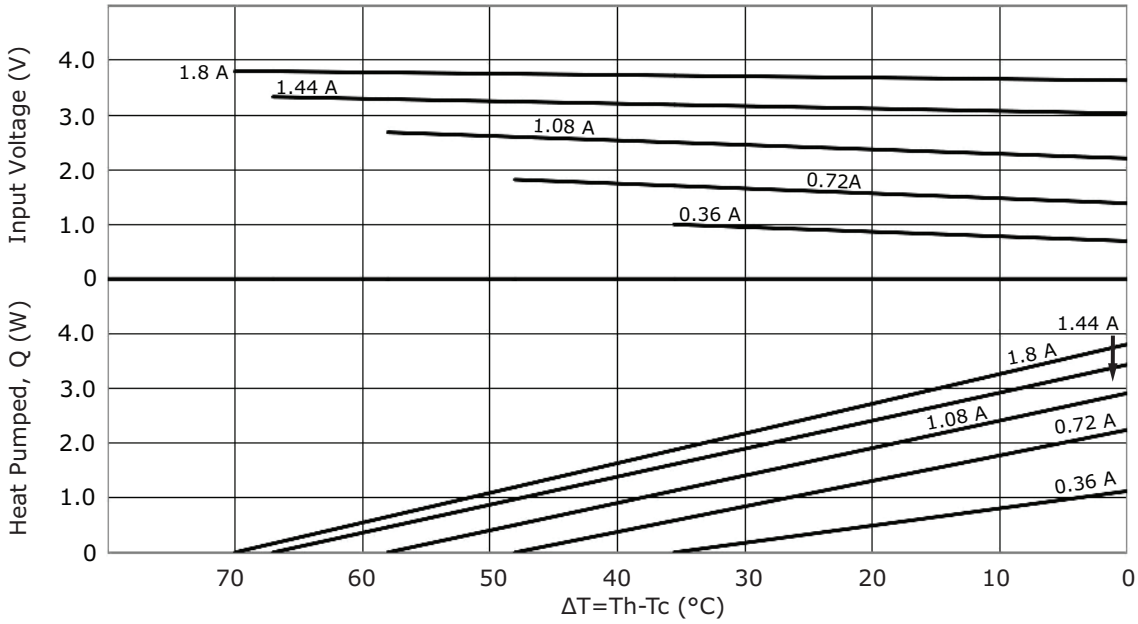
CP1881-222 PERFORMANCE (Th=27°C)



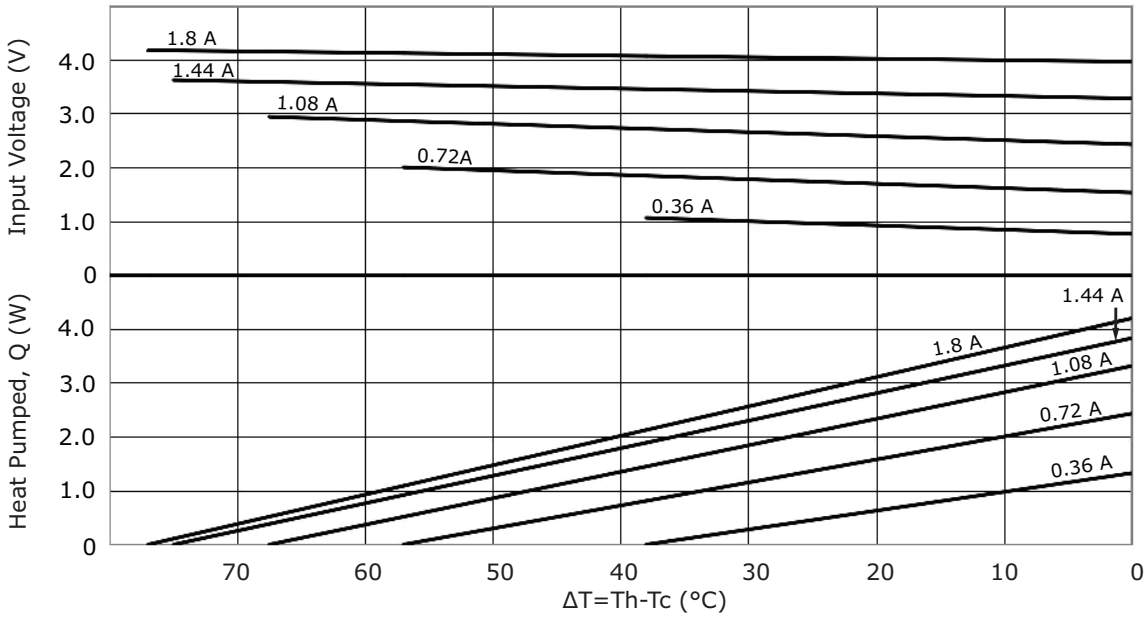
CP1881-222 PERFORMANCE (Th=50°C)



CP1881-254P PERFORMANCE (Th=27°C)



CP1881-254P PERFORMANCE (Th=50°C)



REVISION HISTORY

rev.	description	date
1.0	initial release	07/08/2020
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

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

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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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