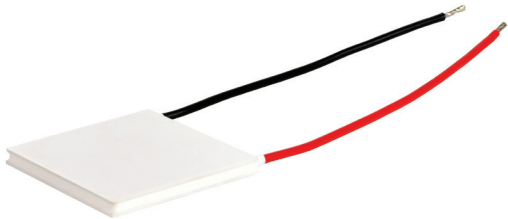




SERIES: CP125 | DESCRIPTION: PELTIER MODULE

FEATURES

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

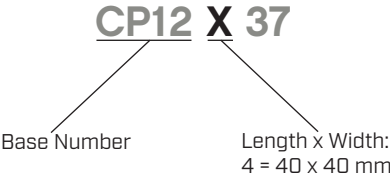


MODEL

	input voltage <sup>1</sup> max [Vdc]	input current <sup>2</sup> max [A]	$T_h=27^{\circ}\text{C}$ [W]	output $Q_{\text{max}}^3$ $T_h=50^{\circ}\text{C}$ [W]	$T_h=27^{\circ}\text{C}$ [°C]	output $\Delta T_{\text{max}}^4$ $T_h=50^{\circ}\text{C}$ [°C]
CP12437	15.4	12.5	110	121	68	75

Notes: 1. Maximum voltage at  $\Delta T_{\text{max}}$  and  $T_h=27^{\circ}\text{C}$   
2. Maximum current to achieve  $\Delta T_{\text{max}}$   
3. Maximum heat absorbed at cold side occurs at  $I_{\text{max}}$ ,  $V_{\text{max}}$ , and  $\Delta T=0^{\circ}\text{C}$   
4. Maximum temperature difference occurs at  $I_{\text{max}}$ ,  $V_{\text{max}}$ , and  $Q=0\text{W}$  ( $\Delta T_{\text{max}}$  measured in a vacuum at 1.3 Pa)

PART NUMBER KEY



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				

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

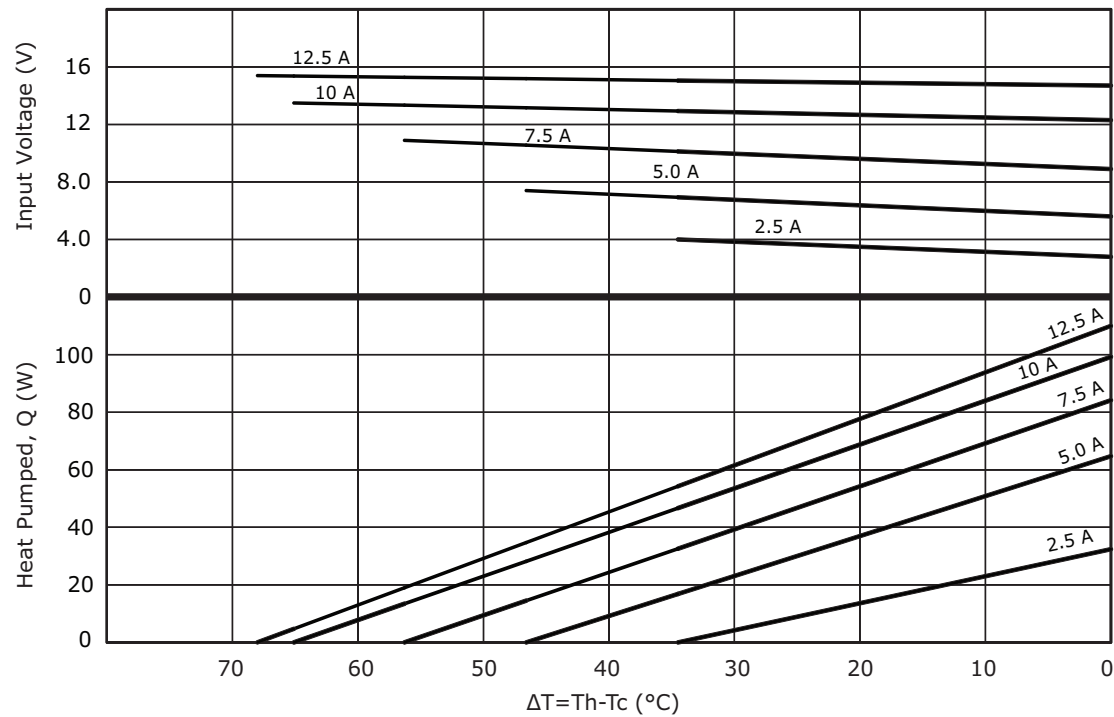
MECHANICAL DRAWING

units: mm

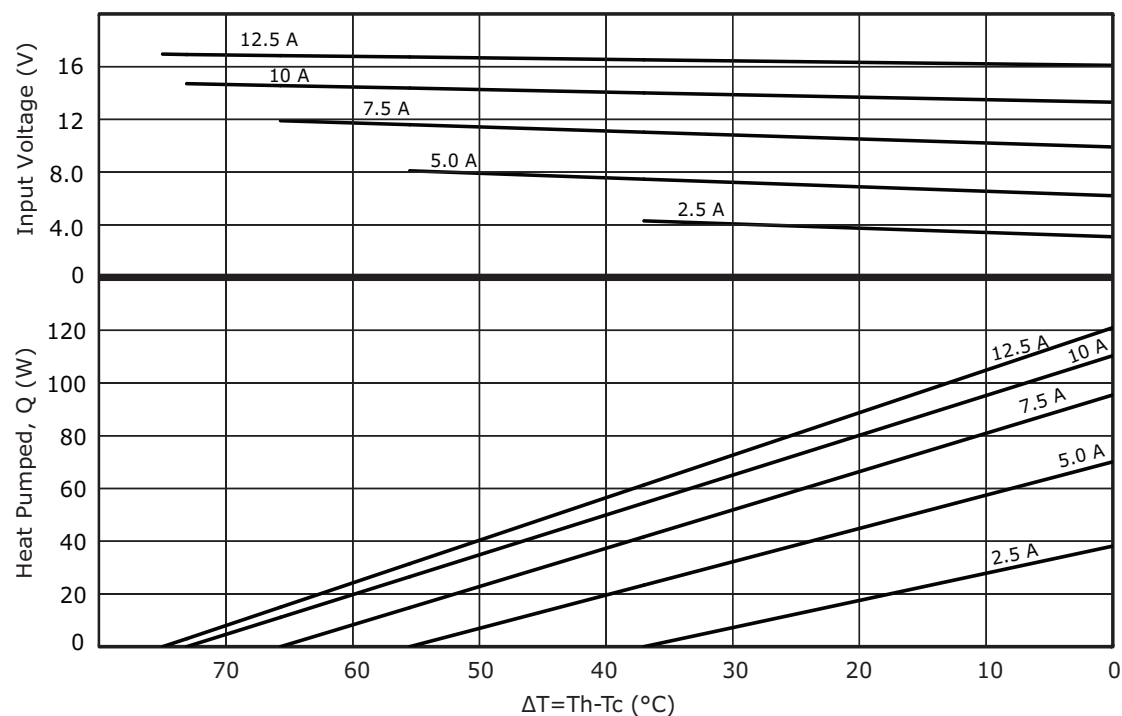
	MATERIAL	PLATING
ceramic plate	96% AL <sub>2</sub> O <sub>3</sub>	
wire leads	18 AWG	tin
sealer	silicon rubber 703 RTV (between cold and hot side plates)	
joint cover	silicon rubber 703 RTV	
marking	P/N & S/N printed on cold side surface	

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
1.03	logo, datasheet style update	08/05/2022
1.04	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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