Additional Resources: Product Page | 3D Model

# **CUI** DEVICES

date 10/30/2019

page 1 of 6

#### SERIES: CP30 **DESCRIPTION: PELTIER MODULE**

#### **FEATURES**

- solid state device
- small and lightweight
- precise temperature control
- quiet operation





MODEL	input voltage	input current	output Qmax¹		output ∆Tmax²	
	max (V)	max (A)	<b>T<sub>h</sub>=27°C</b> (W)	T <sub>h</sub> =50°C (W)	T <sub>h</sub> =27°C (°C)	<b>T<sub>h</sub>=50°C</b> (°C)
CP30138	3.8	3	6.5	7.2	66	72
CP30238	8.6	3	15	16.7	66	72
CP30338	15.4	3	27	30.1	66	72

Notes:

1. maximum cooling capacity at  $I_{max'}$   $V_{max'}$  and  $\Delta T$ =0°C 2. maximum temperature difference at  $I_{max'}$   $V_{max'}$  and Q=0W (maximum parameters are measured in a vacuum)

#### **PART NUMBER KEY**

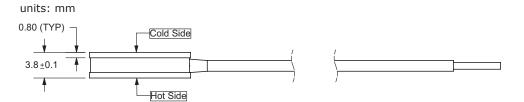
Base Number Thickness Length/Width:  $1 = 15 \times 15 \text{ mm}$  $2 = 20 \times 20 \text{ mm}$  $3 = 30 \times 30 \text{ mm}$ 

#### **SPECIFICATIONS**

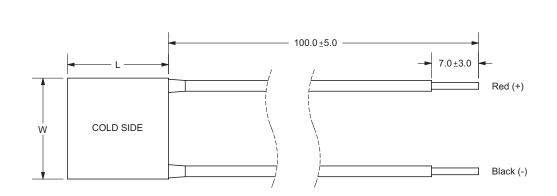
parameter	conditions/description	min	typ	max	units
	CP30138	0.9	1.0	1.1	Ω
internal resistance <sup>3</sup>	CP30238	2.07	2.3	2.53	Ω
	CP30338	3.6	4.0	4.4	Ω
solder melting temperature	connection between termoelectric pairs			138	°C
				98.07	N/cm <sup>2</sup>
assembly compression				10	kgf/cm²
RoHS	ves				

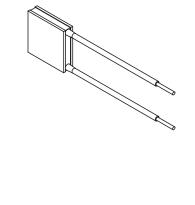
Notes: 3. measured by AC 4-terminal method at 25°C

#### **MECHANICAL DRAWING**



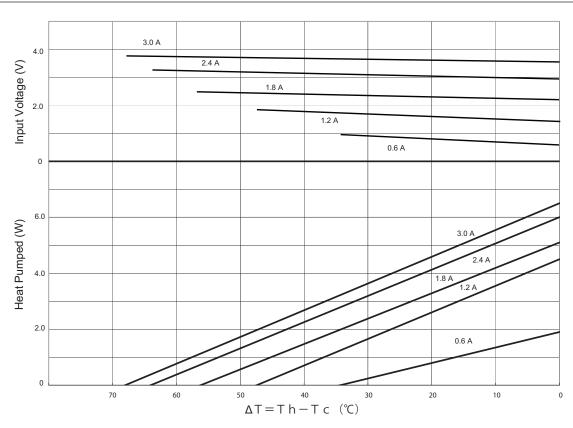
	MATERIAL	PLATING
ceramic plate	Al <sub>2</sub> 0 <sub>3</sub> (Alumina)	
sealer	silicon rubber RTV	
lead wire	UL1430 (22AWG)	tin
joint cover	silicon rubber RTV	



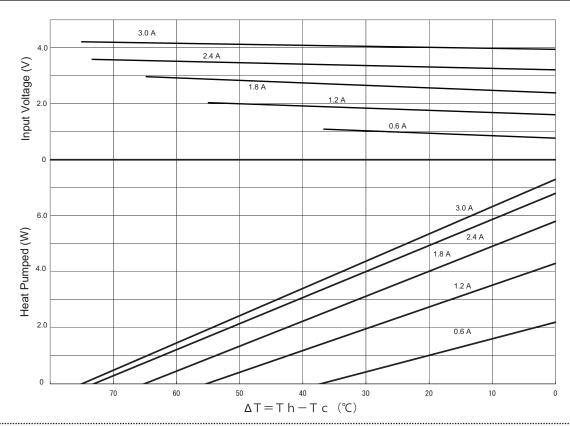


MODEL NO.	LENGTH (mm)	WIDTH (mm)	THICKNESS (mm)
CP30138	15 ±0.3	15 ±0.3	3.8 ±0.1
CP30238	20 ±0.3	20 ±0.3	3.8 ±0.1
CP30338	30 ±0.3	30 ±0.3	3.8 ±0.1

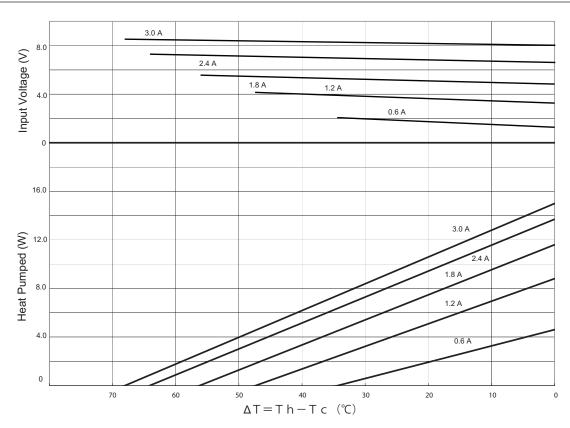
### CP30138 PERFORMANCE (Th=27°C)



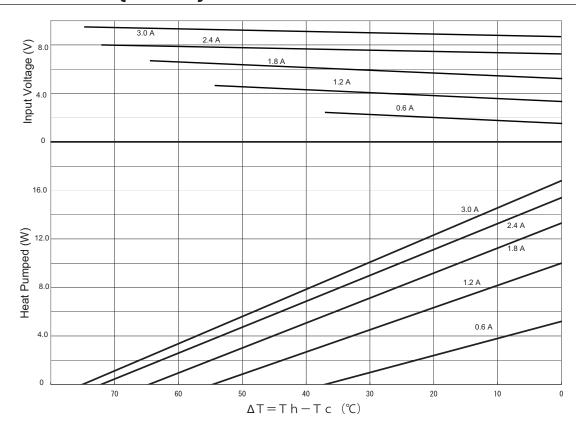
## CP30138 PERFORMANCE (Th=50°C)



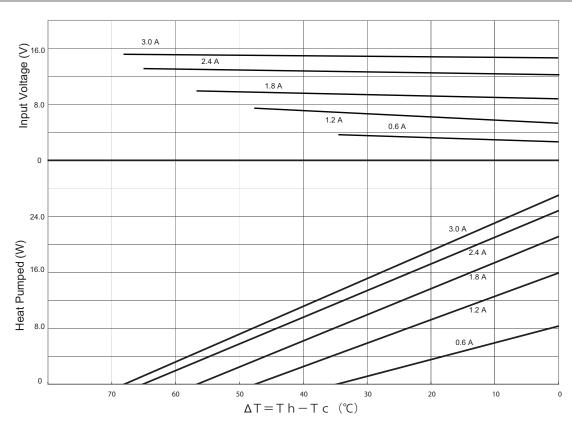
### CP30238 PERFORMANCE (Th=27°C)



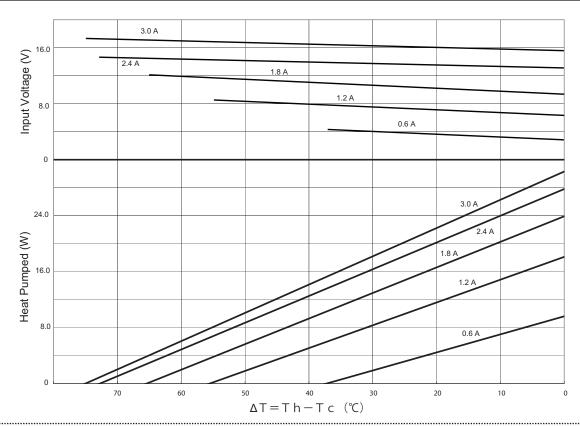
### CP30238 PERFORMANCE (Th=50°C)



### CP30338 PERFORMANCE (Th=27°C)



## CP30338 PERFORMANCE (Th=50°C)



Additional Resources: Product Page | 3D Model

CUI Devices | SERIES: CP30 | DESCRIPTION: PELTIER MODULE date 10/30/2019 | page 6 of 6

#### **REVISION HISTORY**

rev.	description	date
1.0	initial release	09/03/2009
1.01	applied new template	05/07/2012
1.02	brand update	10/30/2019

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

# **CUI** DEVICES

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

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

CUI Devices 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.