Additional Resources: Product Page | 3D Model

**CUI** DEVICES

date 10/28/2019

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#### **SERIES:** CP20 | **DESCRIPTION:** PELTIER MODULE

#### **FEATURES**

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





MODEL	input voltage¹	input current²	internal resistance³	output Qmax⁴		output ∆Tmax⁵	
	max (Vdc)	max (A)	$ ext{typ} \ (\Omega \pm 10\%)$	T <sub>h</sub> =27°C (W)	T <sub>h</sub> =50°C (W)	<b>T<sub>h</sub>=27°C</b> (°C)	<b>T<sub>h</sub>=50°C</b> (°C)
CP20151	3.8	2	1.6	3.7	4.0	66	72
CP20251	8.6	2	3.5	8.5	9.4	66	72
CP20351	15.4	2	6.7	15.2	16.9	66	72

Notes:

- 1. Maximum voltage at  $\Delta T$  max and  $T_h$ =27°C 2. Maximum current to achieve  $\Delta T$  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  $\Delta T=0$ °C 5. Maximum temperature difference occurs at  $I_{max'}$   $V_{max}$ , and Q=0W ( $\Delta T$  max measured in a vacuum at 1.3 Pa)

CUI Devices | SERIES: CP20 | DESCRIPTION: PELTIER MODULE

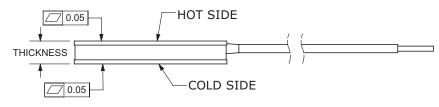
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#### **SPECIFICATIONS**

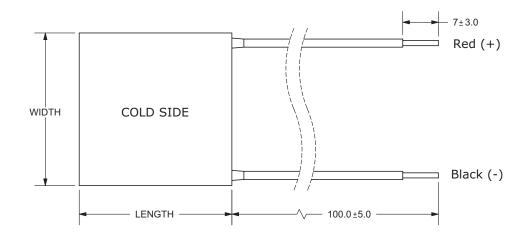
parameter	conditions/description	min	typ	max	units
solder melting temperature	connection between thermoelectric pairs	235			°C
assembly compression				1	MPa
hot side plate				80	°C
RoHS	yes				

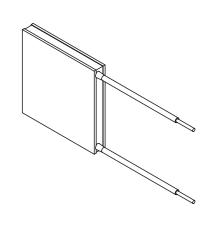
#### **MECHANICAL DRAWING**





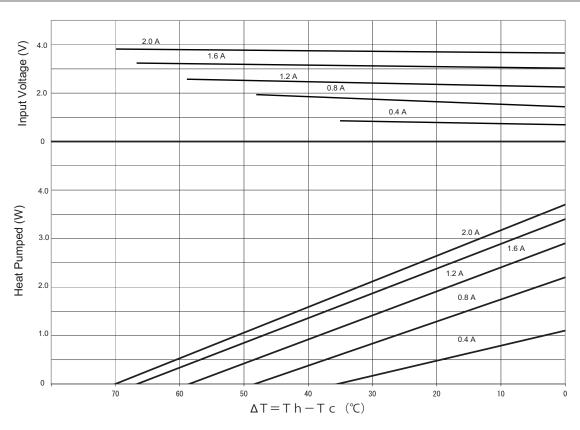
	MATERIAL	PLATING		
ceramic plate	96% AL <sub>2</sub> O <sub>3</sub>			
wire leads	22 AWG	tin		
sealer	silicon rubber 703 RTV (between cold and hot side plates)			
joint cover	nt cover silicon rubber 703 RTV			
marking	P/N & S/N printed on cold side surface			



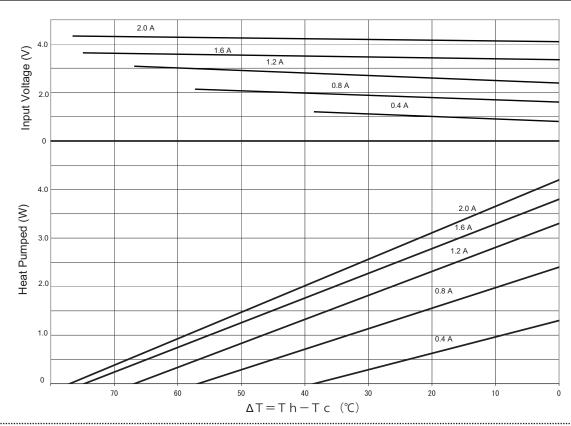


MODEL NO.	LENGTH (mm)	WIDTH (mm)	THICKNESS (mm)	
CP20151	15 ±0.3	15 ±0.3	5.02 ±0.1	
CP20251	20 ±0.3	20 ±0.3	5.02 ±0.1	
CP20351	30 ±0.3	30 ±0.3	5.02 ±0.1	

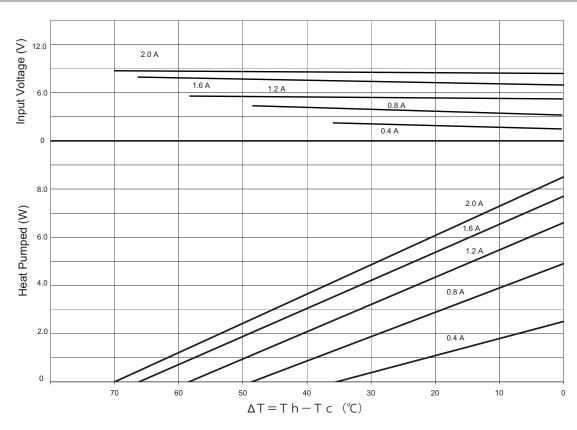
## CP20151 PERFORMANCE (Th=27°C)



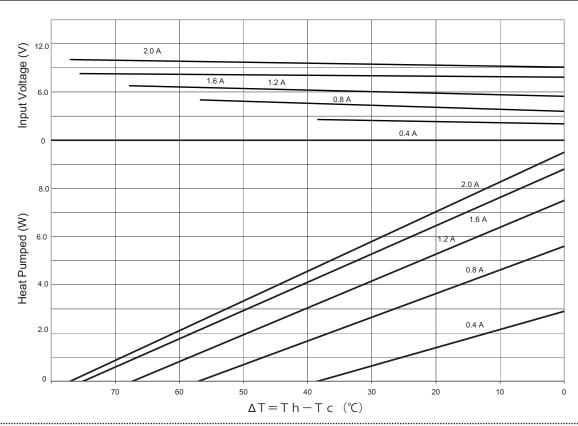
#### CP20151 PERFORMANCE (Th=50°C)



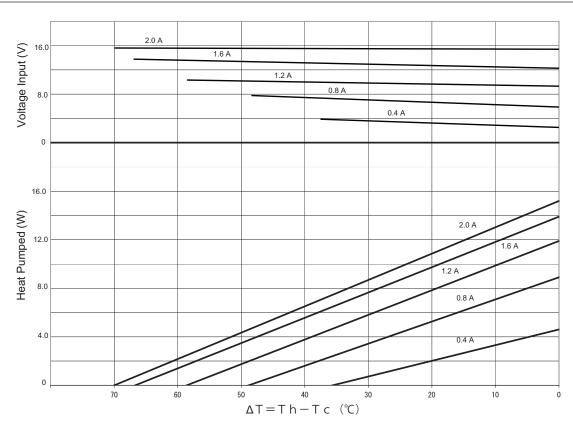
## CP20251 PERFORMANCE (Th=27°C)



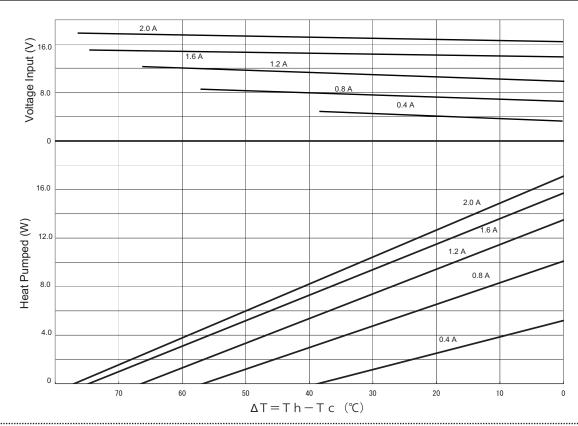
#### CP20251 PERFORMANCE (Th=50°C)



## CP20351 PERFORMANCE (Th=27°C)



## CP20351 PERFORMANCE (Th=50°C)



Additional Resources: Product Page | 3D Model

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#### **REVISION HISTORY**

rev.	description	date
1.0	initial release	09/03/2009
1.01	applied new template	05/07/2012
1.02	changed thickness of all models	09/20/2018
1.03	brand update	10/28/2019

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.

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**CUI Devices**:

CP20151 CP20351 CP20251