

date 08/05/2022

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# SERIES: CP15-M | DESCRIPTION: PELTIER MODULE

#### **FEATURES**

- micro size (less than 10 x 10 mm)
- $\bullet \text{ wide } \Delta \text{T max}$
- Qmax of 3.5 W
- precise temperature control
- solid state construction





MODEL	input	input	internal	output		output	
	voltage¹	current²	resistance³	Qmax⁴		∆Tmax⁵	
	<b>max</b>	max	<b>typ</b>	T <sub>h</sub> =27°C	T <sub>h</sub> =50°C	<b>T<sub>h</sub>=27°C</b>	T <sub>h</sub> =50°C
	(Vdc)	[A]	[Ω±10%]	(W)	(W)	(°C)	(°C)
CP151188-271	3.8	1.5	1.93	3.2	3.5	70	77

Notes:

- 1. Maximum voltage at  $\Delta T$  max and  $T_{\rm h}$  =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  $\Delta T=0^{\circ}C$ 5. Maximum temperature difference occurs at  $I_{max}$ ,  $V_{max}$ , and Q=DW ( $\Delta T$  max measured in a vacuum at 1.3 Pa)

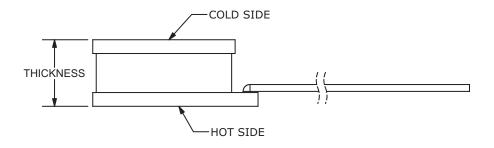
# **SPECIFICATIONS**

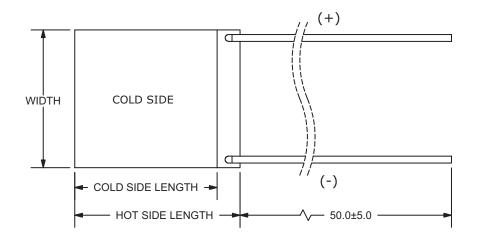
parameter	conditions/description	min	typ	max	units
solder melting temperature	connection between thermoelectric pairs	235			°C
assembly compression				0.8	MPa
RoHS	yes				

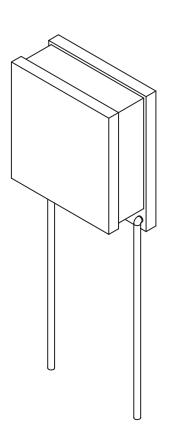
### **MECHANICAL DRAWING**

units: mm

	MATERIAL	PLATING
ceramic plate	96% AL <sub>2</sub> O <sub>3</sub>	
wire leads	Ø0.25-0.3 mm annealed copper	tin
sealer	no sealing	

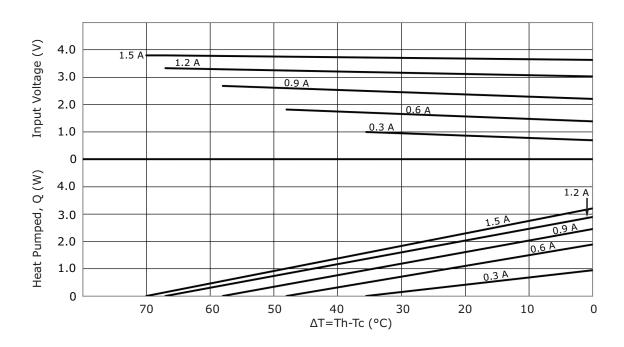




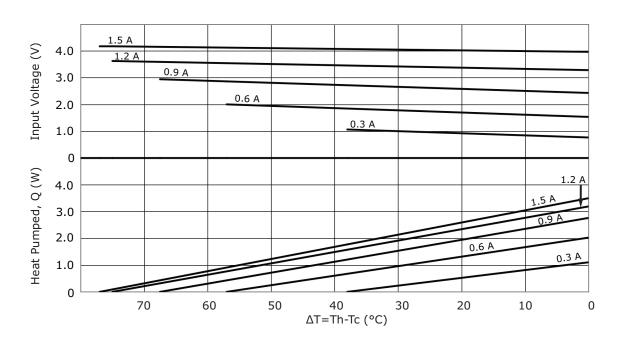


MODEL NO.	HOT SIDE LENGTH (mm)	COLD SIDE LENGTH (mm)	WIDTH (mm)	THICKNESS (mm)	
CP151188-271	11.0 ±0.3	8.8 ±0.3	8.8 ±0.3	2.71 ±0.15	

# CP151188-271 PERFORMANCE (Th=27°C)



### CP151188-271 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	

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



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