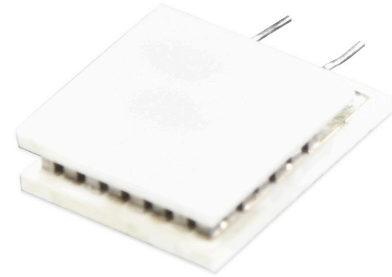


**SERIES:** CP15-M | **DESCRIPTION:** PELTIER MODULE

**FEATURES**

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


**MODEL**

|              | input voltage <sup>1</sup> | input current <sup>2</sup> | internal resistance <sup>3</sup> | output $Q_{max}$ <sup>4</sup>   |                                 | output $\Delta T_{max}$ <sup>5</sup>             |  |
|--------------|----------------------------|----------------------------|----------------------------------|---------------------------------|---------------------------------|--|--|
|              | max<br>[Vdc]               | max<br>[A]                 | typ<br>[ $\Omega \pm 10\%$ ]     | $T_h = 27^\circ\text{C}$<br>[W] | $T_h = 50^\circ\text{C}$<br>[W] | $T_h = 27^\circ\text{C}$<br>[ $^\circ\text{C}$ ] | $T_h = 50^\circ\text{C}$<br>[ $^\circ\text{C}$ ] |
| CP151188-271 | 3.8                        | 1.5                        | 1.93                             | 3.2                             | 3.5                             | 70   | 77   |

Notes: 1. Maximum voltage at  $\Delta T$  max and  $T_h = 27^\circ\text{C}$   
 2. Maximum current to achieve  $\Delta T$  max  
 3. Measured by AC 4-terminal method at  $25^\circ\text{C}$   
 4. Maximum heat absorbed at cold side occurs at  $I_{max}$ ,  $V_{max}$ , and  $\Delta T = 0^\circ\text{C}$   
 5. Maximum temperature difference occurs at  $I_{max}$ ,  $V_{max}$ , and  $Q = 0\text{W}$  ( $\Delta T$  max measured in a vacuum at 1.3 Pa)

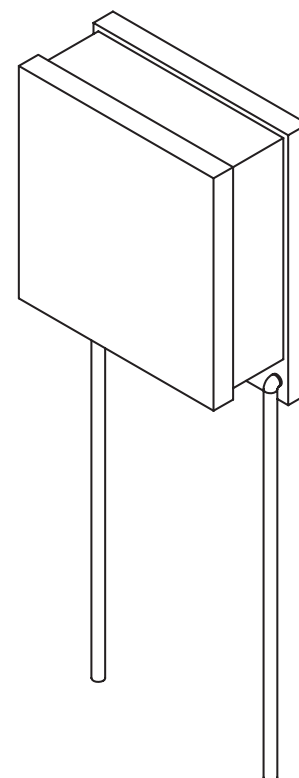
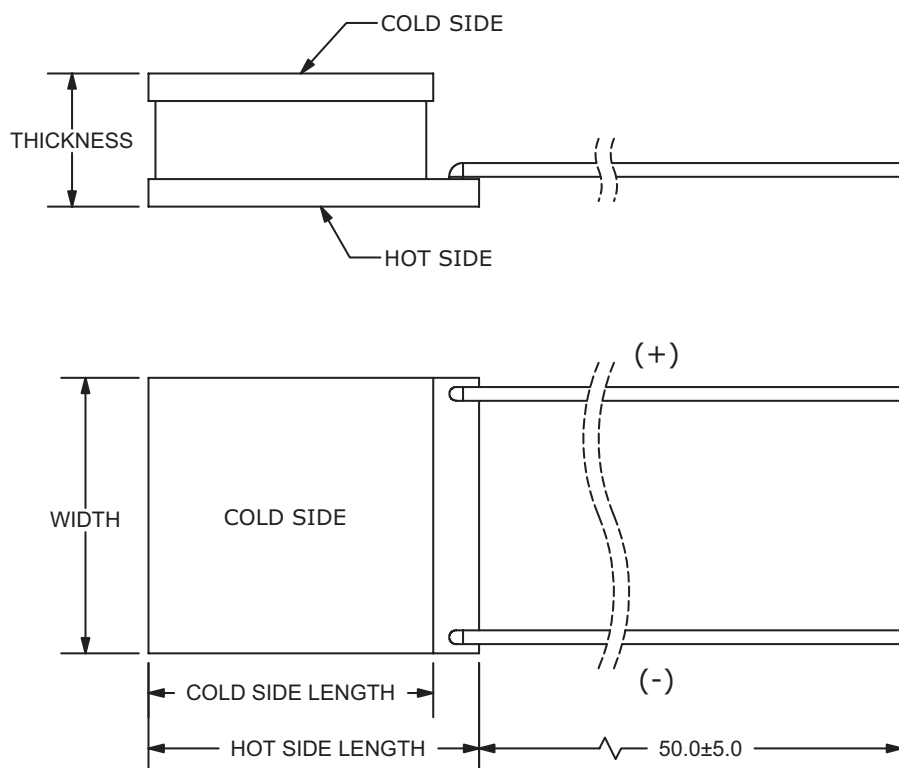
## SPECIFICATIONS

| 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

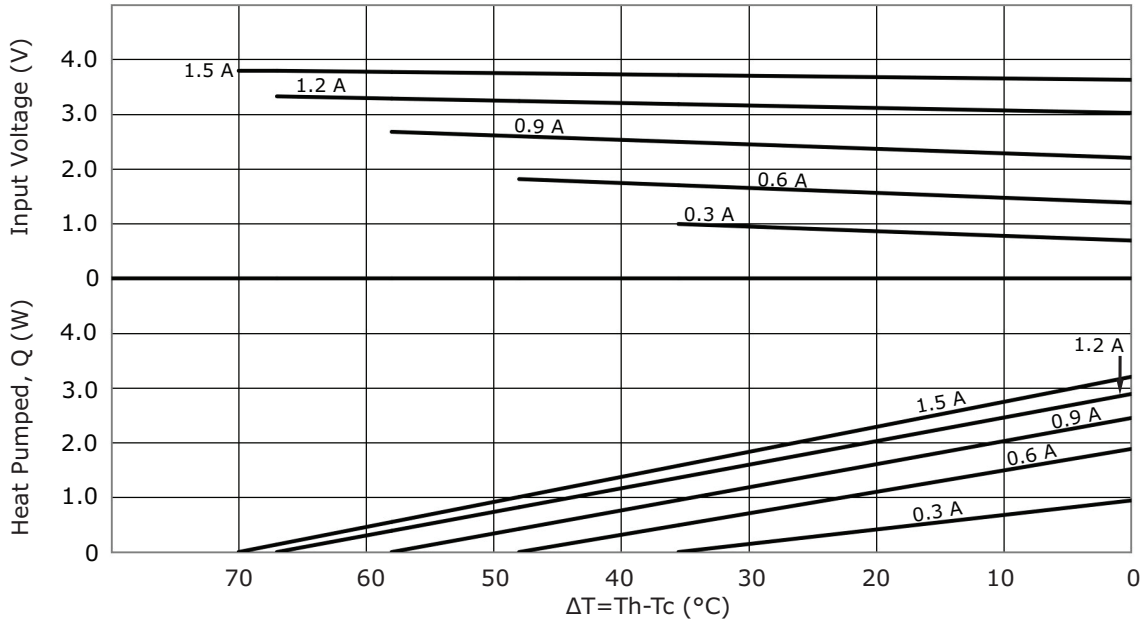
units: mm

|               | MATERIAL                           | PLATING |
|---------------|------------------------------------|---------|
| ceramic plate | 96% AL <sub>2</sub> O <sub>3</sub> |         |
| wire leads    | ∅0.25-0.3 mm<br>annealed copper    | tin     |
| sealer        | no sealing                         |         |

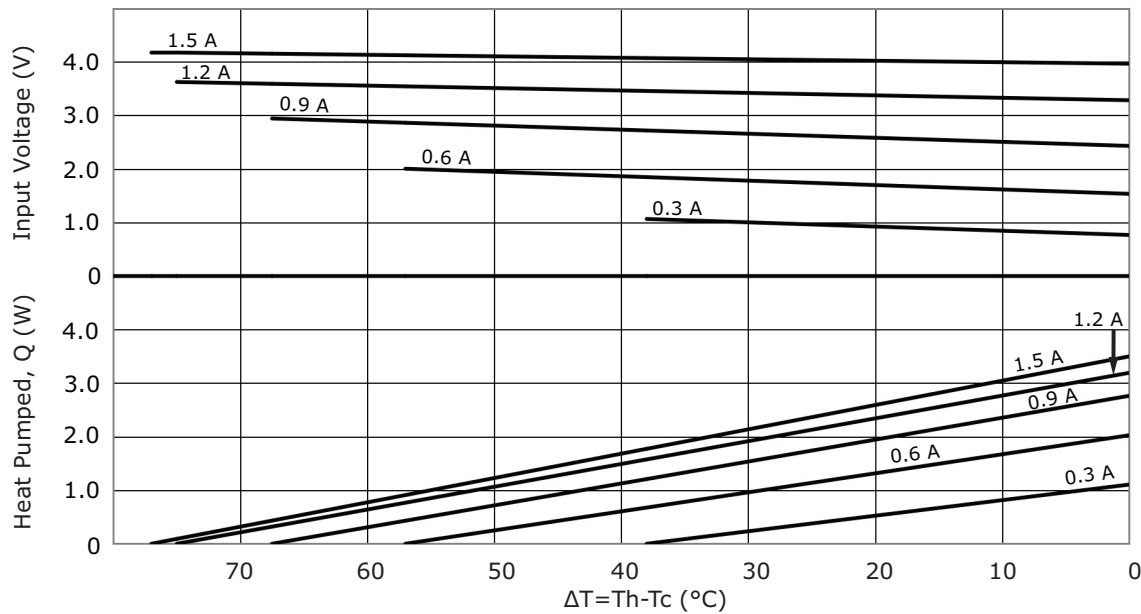


| MODEL NO.    | HOT SIDE LENGTH [mm] | COLD SIDE LENGTH [mm] | WIDTH [mm] | THICKNESS [mm] |
|--------------|----------------------|-----------------------|------------|----------------|
| CP151188-271 | 11.0 ± 0.3           | 8.8 ± 0.3             | 8.8 ± 0.3  | 2.71 ± 0.15    |

### 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.



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

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