

**MODEL:** CPM-2H | **DESCRIPTION:** PELTIER COOLING UNIT**FEATURES**

- arcTEC™ structure
- easy installation
- tight seal structure for water resistance and absorption of thermal stress
- wide  $\Delta T$  max
- precise temperature control

**MODEL**

|        | input voltage <sup>1</sup><br>max<br>[V] | input current<br>max<br>[A] | output $Q_{max}^2$<br>$T_h=50^\circ\text{C}$<br>[W] | output $\Delta T_{max}^2$<br>$T_h=50^\circ\text{C}$<br>[°C] |
|--------|--|-----------------------------|---|---|
| CPM-2H | 12                                       | 8.5                         | 58.95   | 70  |

Notes:

1. at inverse voltage, "cold side plate" becomes hot side plate
2. maximum cooling capacity at  $I_{max}$ ,  $V_{max}$ , and  $\Delta T=0^\circ\text{C}$
3. maximum temperature difference at  $I_{max}$ ,  $V_{max}$ , and  $Q=0\text{W}$  (maximum parameters are measured in a vacuum)

**SPECIFICATIONS**

| parameter                        | conditions/description | min  | typ | max  | units    |
|----------------------------------|------------------------|------|-----|------|----------|
| internal resistance <sup>4</sup> |                        | 1.35 |     | 1.65 | $\Omega$ |
| cold side plate                  |                        | -20  |     | 60   | °C       |

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

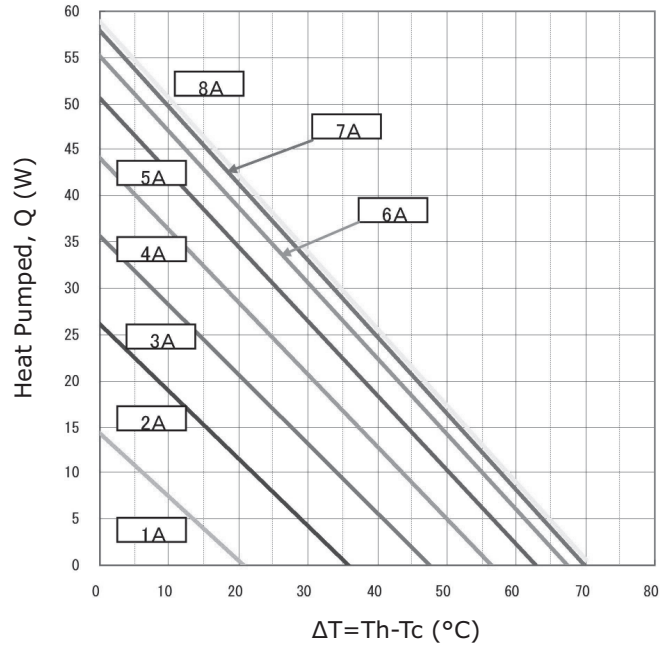
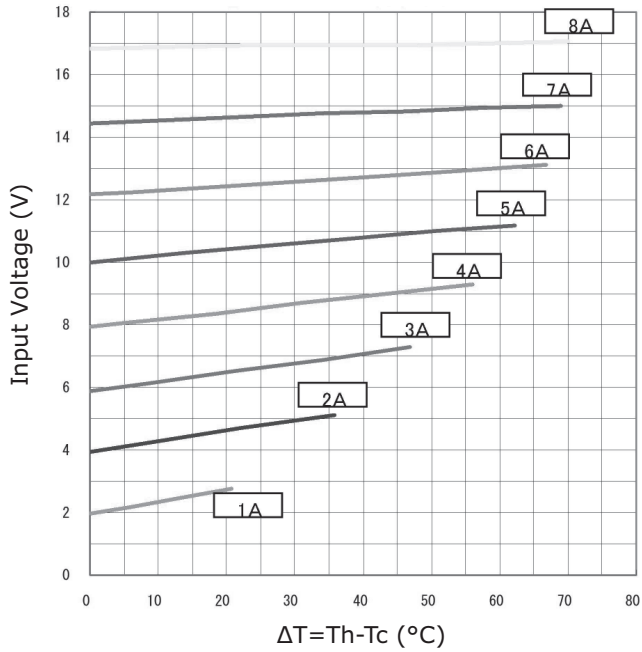
**SAFETY & COMPLIANCE**

| parameter             | conditions/description     | min | typ | max   | units      |
|-----------------------|----------------------------|-----|-----|-------|------------|
| isolation voltage     | for 1 second               |     |     | 1,200 | Vac        |
| insulation resistance | input to output at 250 Vdc | 10  |     |       | M $\Omega$ |
| RoHS                  | yes                        |     |     |       |            |

**ENVIRONMENTAL**

| parameter             | conditions/description | min | typ | max | units |
|-----------------------|------------------------|-----|-----|-----|-------|
| operating temperature |                        | 0   |     | 35  | °C    |
| storage temperature   |                        | -20 |     | 70  | °C    |
| operating humidity    |                        | 30  |     | 85  | %     |
| storage humidity      |                        | 10  |     | 90  | %     |

## CPM-2H PERFORMANCE (Th=50°C)



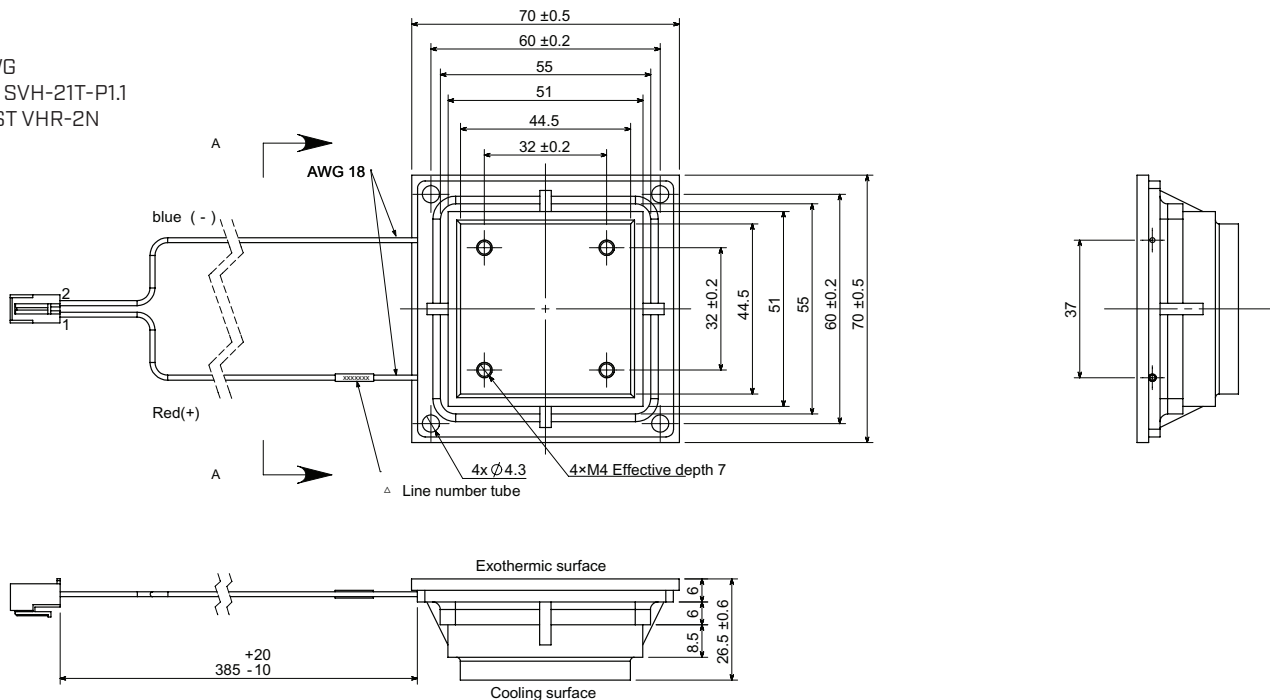
## MECHANICAL

| parameter             | conditions/description | min | typ | max | units |
|-----------------------|------------------------|-----|-----|-----|-------|
| weight                |                        |     | 200 |     | g     |
| cooling medium        | aluminum               |     |     |     |       |
| heat radiation medium | aluminum               |     |     |     |       |

## MECHANICAL DRAWING

units: mm

wire: 18 AWG  
 Connector: SVH-21T-P1.1  
 housing: JST VHR-2N



## REVISION HISTORY

| rev. | description                  | date       |
|------|------------------------------|------------|
| 1.0  | initial release              | 11/07/2019 |
| 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.

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.

[cuidevices.com](http://cuidevices.com)