



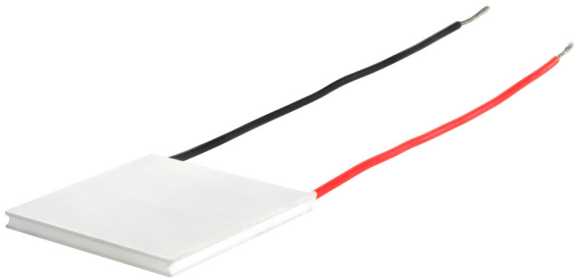
SERIES: CP105H

|

DESCRIPTION: PELTIER MODULE

FEATURES

- arcTEC™ structure
- solid state device
- precise temperature control
- silent operation



MODEL

|            | input<br>voltage <sup>1</sup><br>max<br>[Vdc] | input<br>current <sup>2</sup><br>max<br>[A] | internal<br>resistance <sup>3</sup><br>typ<br>[Ω±10%] | output<br>Qmax <sup>4</sup> |                             | output<br>ΔTmax <sup>5</sup> |                              |
|------------|-----------------------------------------------|---------------------------------------------|-------------------------------------------------------|-----------------------------|-----------------------------|------------------------------|------------------------------|
|            |                                               |                                             |                                                       | T <sub>h</sub> =27°C<br>[W] | T <sub>h</sub> =50°C<br>[W] | T <sub>h</sub> =27°C<br>[°C] | T <sub>h</sub> =50°C<br>[°C] |
| CP105433H  | 15.4                                          | 10.5                                        | 1.15                                                  | 93                          | 102                         | 68                           | 75                           |
| CP1054033H | 24.1                                          | 10.5                                        | 1.83                                                  | 148                         | 163                         | 68                           | 75                           |

- Notes:
1. Maximum voltage at ΔT max and T<sub>h</sub>=27°C

2. Maximum current to achieve ΔT max

3. Measured by AC 4-terminal method at 25°C

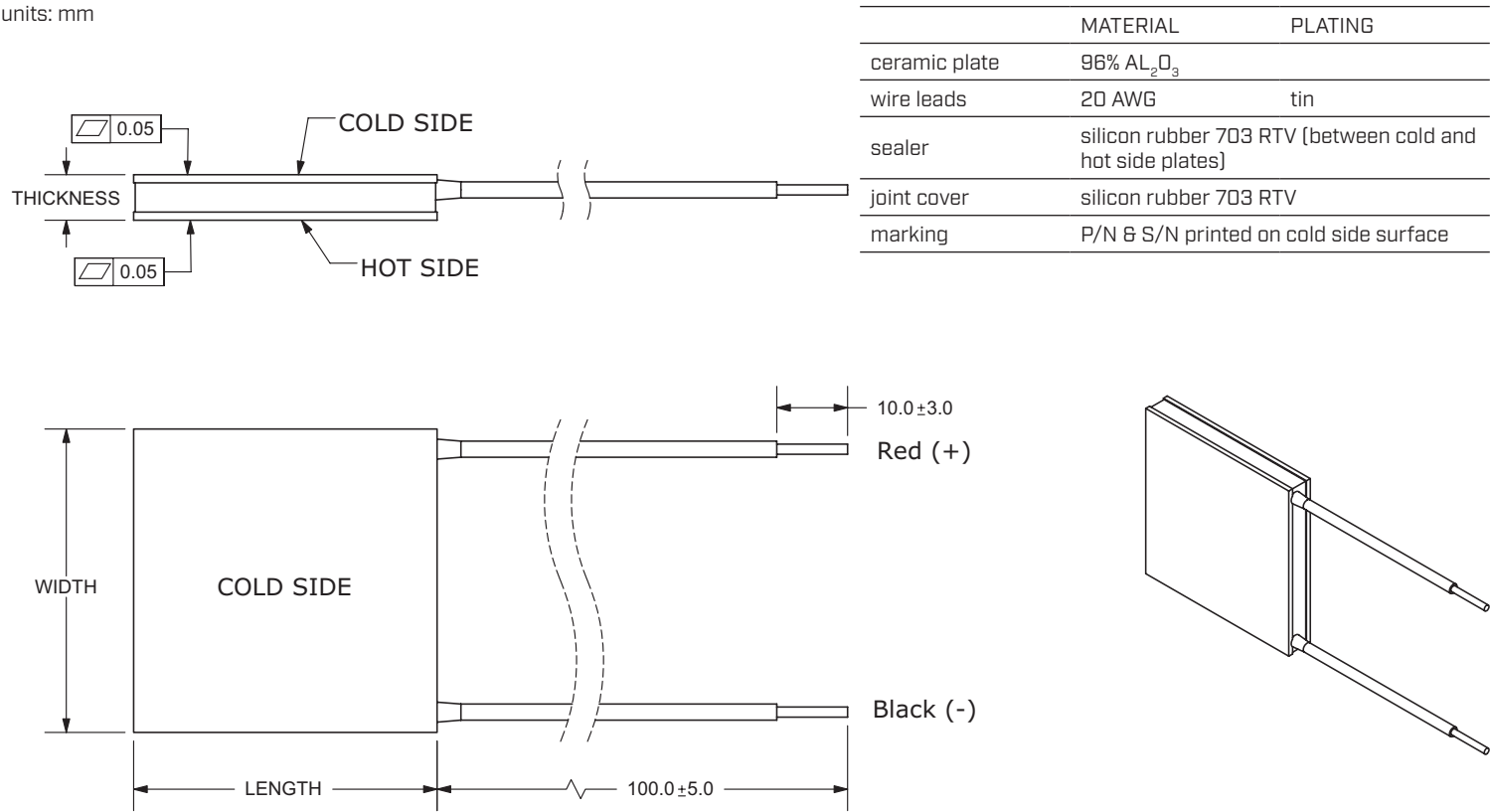
4. Maximum heat absorbed at cold side occurs at I<sub>max</sub>, V<sub>max</sub>, and ΔT=0°C

5. Maximum temperature difference occurs at I<sub>max</sub>, V<sub>max</sub>, and Q=0W (ΔT max measured in a vacuum at 1.3 Pa)

SPECIFICATIONS

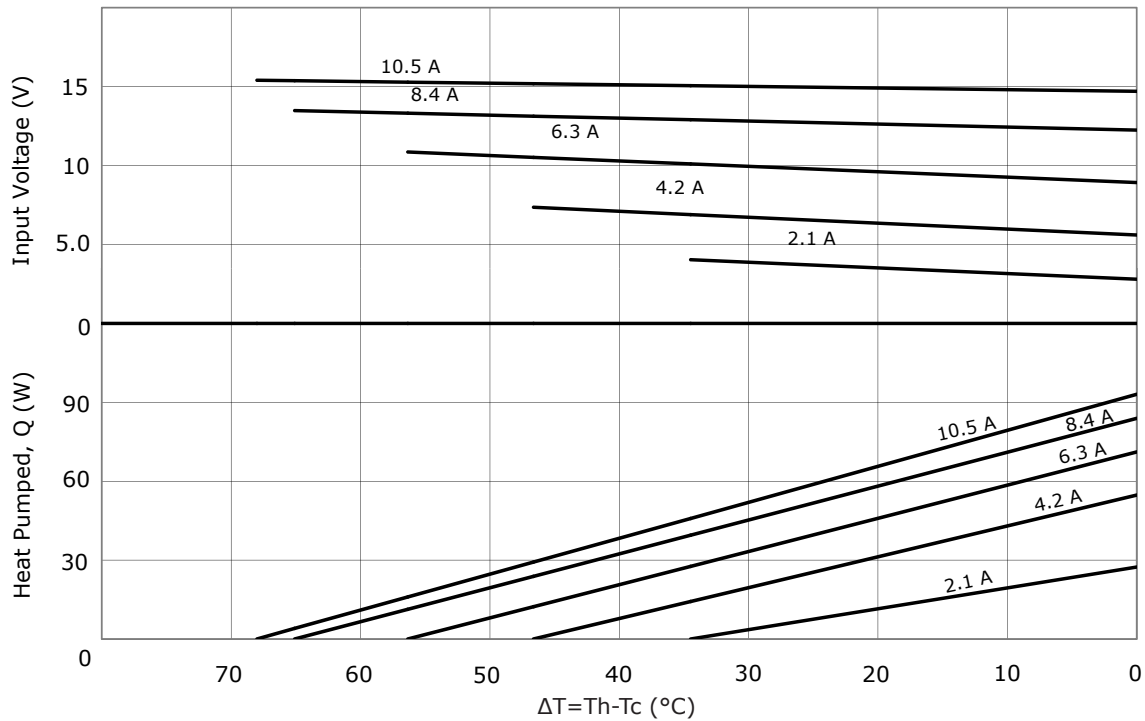
| parameter                  | conditions/description                  | min | typ | max | units |
|----------------------------|-----------------------------------------|-----|-----|-----|-------|
| solder melting temperature | connection between thermoelectric pairs | 235 |     |     | °C    |
| assembly compression       |                                         |     |     | 1   | MPa   |
| hot side plate             |                                         |     |     | 100 | °C    |
| RoHS                       | yes                                     |     |     |     |       |

MECHANICAL DRAWING

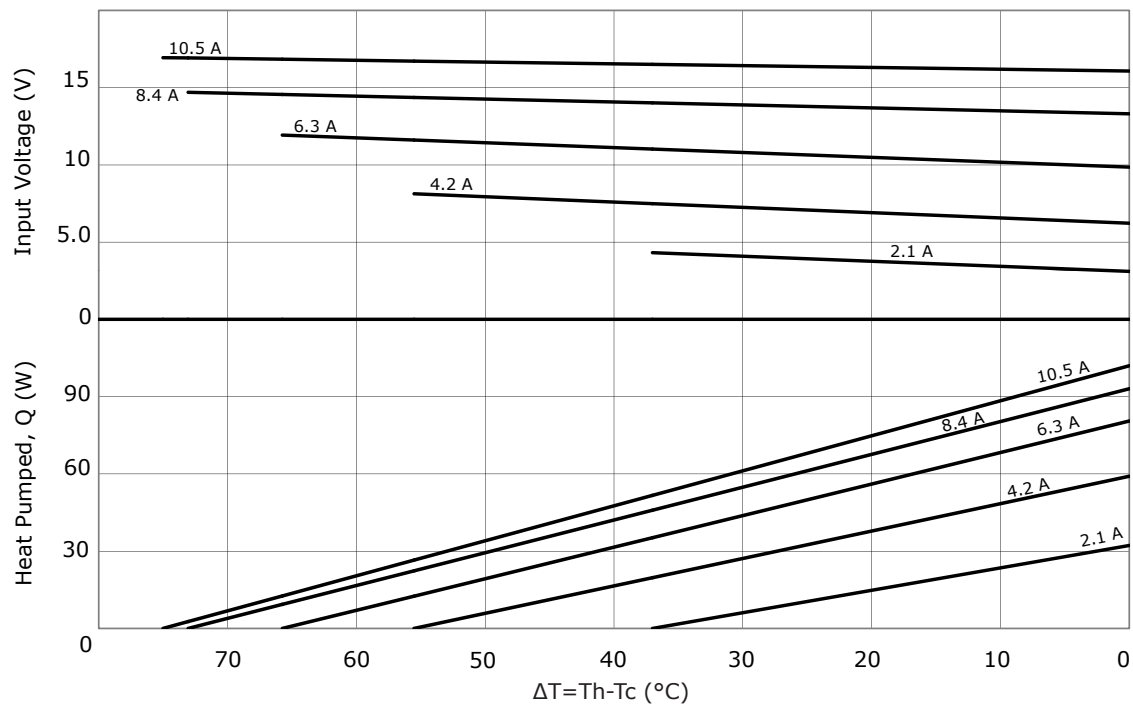


| MODEL NO.  | LENGTH [mm] | WIDTH [mm] | THICKNESS [mm] |
|------------|-------------|------------|----------------|
| CP105433H  | 40 ±0.3     | 40 ±0.3    | 3.3 ±0.1       |
| CP1054033H | 40 ±0.3     | 40 ±0.3    | 3.3 ±0.1       |

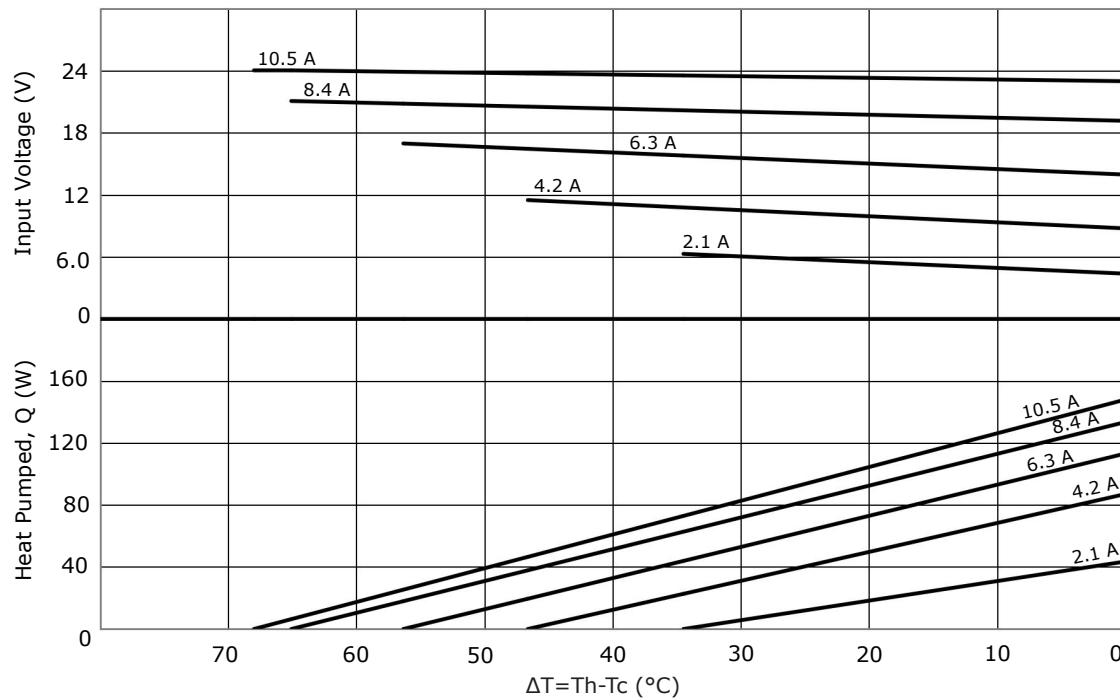
## CP105433H PERFORMANCE (Th=27°C)



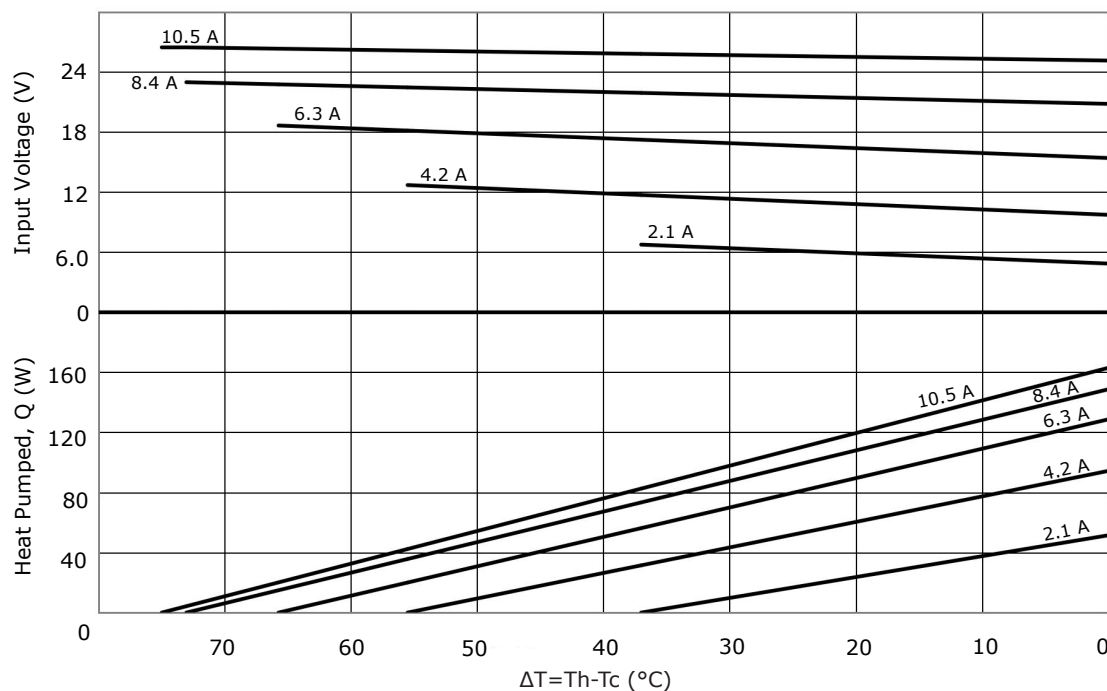
## CP105433H PERFORMANCE (Th=50°C)



## CP1054033H PERFORMANCE (Th=27°C)



## CP1054033H PERFORMANCE (Th=50°C)



REVISION HISTORY

| rev. | description                       | date       |
|------|-----------------------------------|------------|
| 1.0  | initial release                   | 05/21/2018 |
| 1.01 | brand update                      | 10/28/2019 |
| 1.02 | added model CP1054033H            | 11/09/2020 |
| 1.03 | logo, datasheet style update      | 08/05/2022 |
| 1.04 | CUI Devices rebranded to Same Sky | 09/12/2024 |

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



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

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