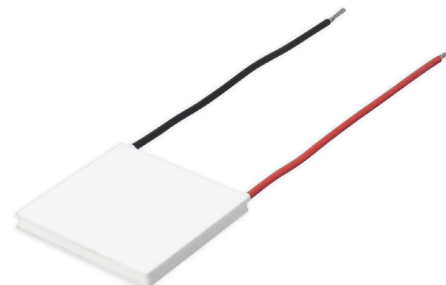


**SERIES:** CP200 | **DESCRIPTION:** PELTIER MODULE**FEATURES**

- arcTEC™ structure
- enhanced reliability for high thermal cycling
- high I<sub>max</sub> rating of 20 A
- silicon sealed
- wide  $\Delta T$  max
- precise temperature control
- solid state construction

**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>[ $\Omega \pm 10\%$ ] | output<br>Q <sub>max</sub> <sup>4</sup> |                             | output<br>$\Delta T$ max <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] |
| CP200543636 | 8.5                                           | 20                                          | 0.33±0.05                                                           | 96                                      | 105                         | 70                                    | 77                           |

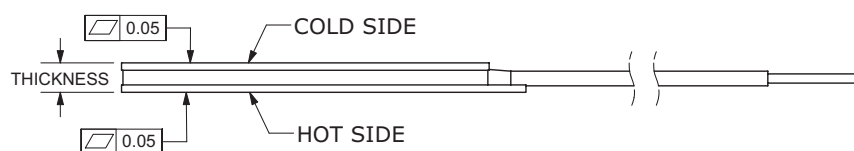
Notes: 1. Maximum voltage at  $\Delta T$  max and T<sub>h</sub>=27°C  
 2. Maximum current to achieve  $\Delta T$  max  
 3. Measured by AC 4-terminal method at 25°C  
 4. Maximum heat absorbed at cold side occurs at I<sub>max</sub>, V<sub>max</sub>, and  $\Delta T=0^\circ\text{C}$   
 5. Maximum temperature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

## SPECIFICATIONS

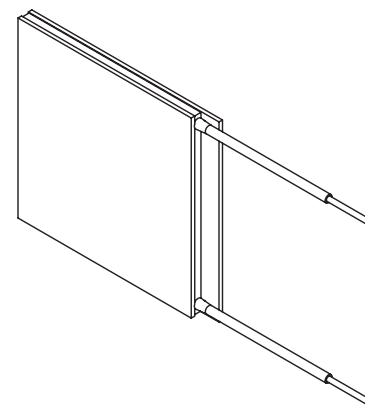
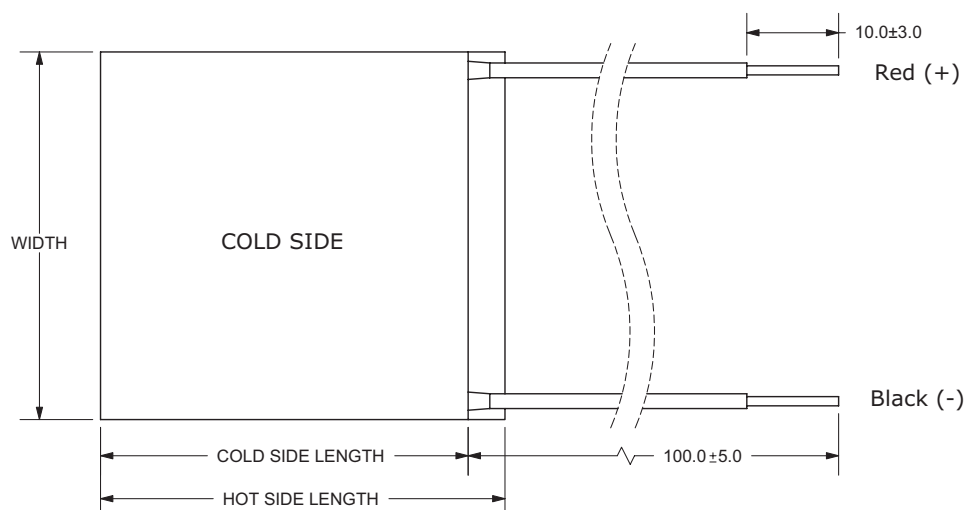
| parameter                  | conditions/description                  | min | typ | max | units |
|----------------------------|-----------------------------------------|-----|-----|-----|-------|
| solder melting temperature | connection between thermoelectric pairs | 235 |     |     | °C    |
| assembly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

## MECHANICAL DRAWING

units: mm

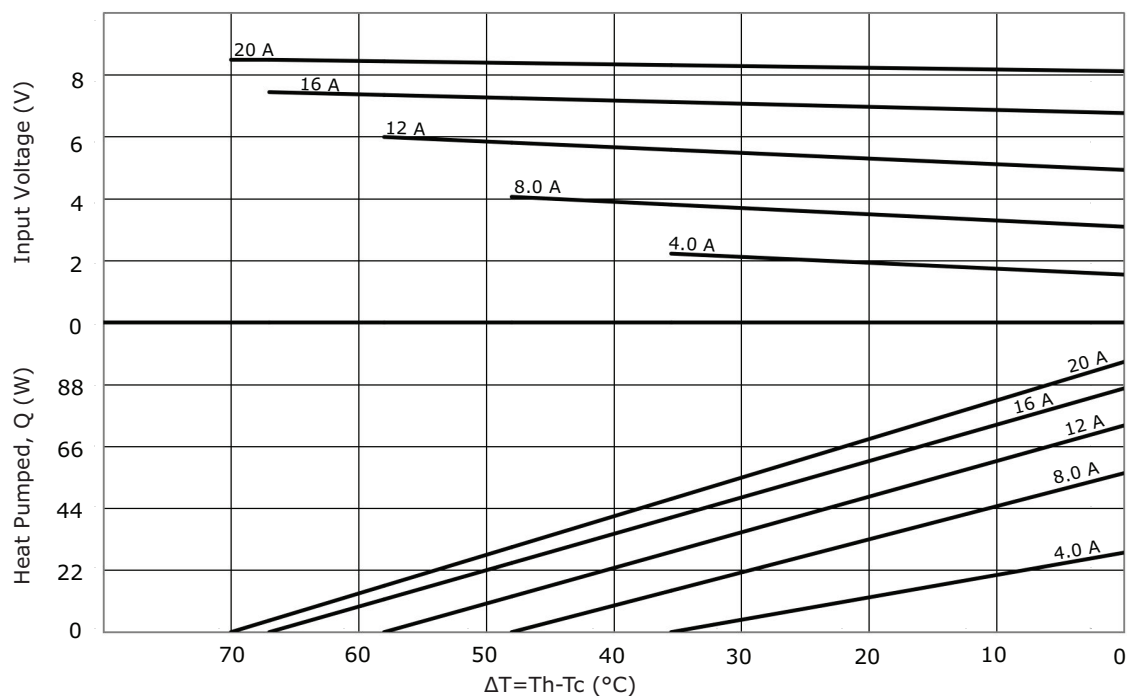


|               | MATERIAL                                                  | PLATING |
|---------------|-----------------------------------------------------------|---------|
| ceramic plate | 96% $Al_2O_3$                                             |         |
| wire leads    | 18 AWG                                                    | tin     |
| sealer        | silicon rubber 703 RTV (between cold and hot side plates) |         |
| joint cover   | silicon rubber 703 RTV                                    |         |
| marking       | P/N & S/N printed on cold side surface                    |         |

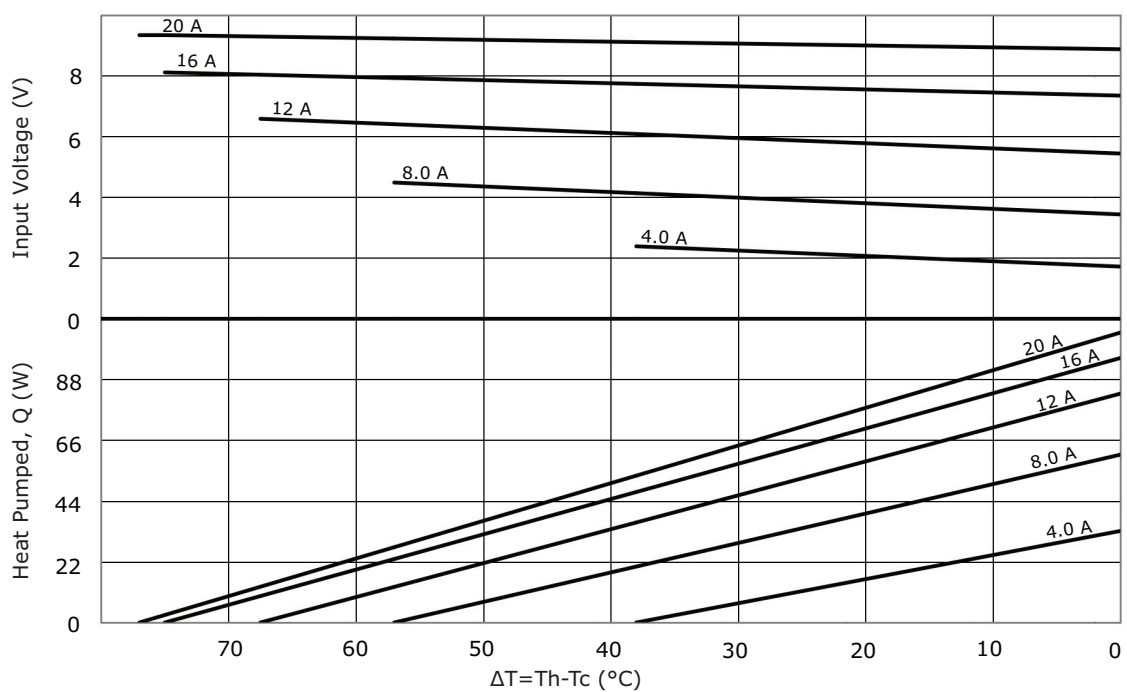


| MODEL NO.   | HOT SIDE LENGTH [mm] | COLD SIDE LENGTH [mm] | WIDTH [mm] | THICKNESS [mm] |
|-------------|----------------------|-----------------------|------------|----------------|
| CP200543636 | 54 ±0.3              | 50 ±0.3               | 36 ±0.3    | 3.6 ±0.025     |

## CP200543636 PERFORMANCE (Th=27°C)



## CP200543636 PERFORMANCE (Th=50°C)



## REVISION HISTORY

| rev. | description                  | date       |
|------|------------------------------|------------|
| 1.0  | initial release              | 11/12/2020 |
| 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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