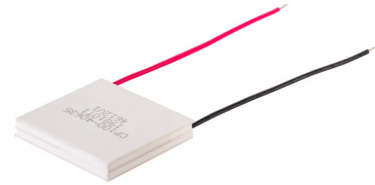


**MODEL:** CP100-40635 | **DESCRIPTION:** PELTIER MODULE**FEATURES**

- arcTEC™ structure
- silicone sealed
- wide  $\Delta T$  max
- dual stage module
- precise temperature control
- solid state construction

**SPECIFICATIONS**

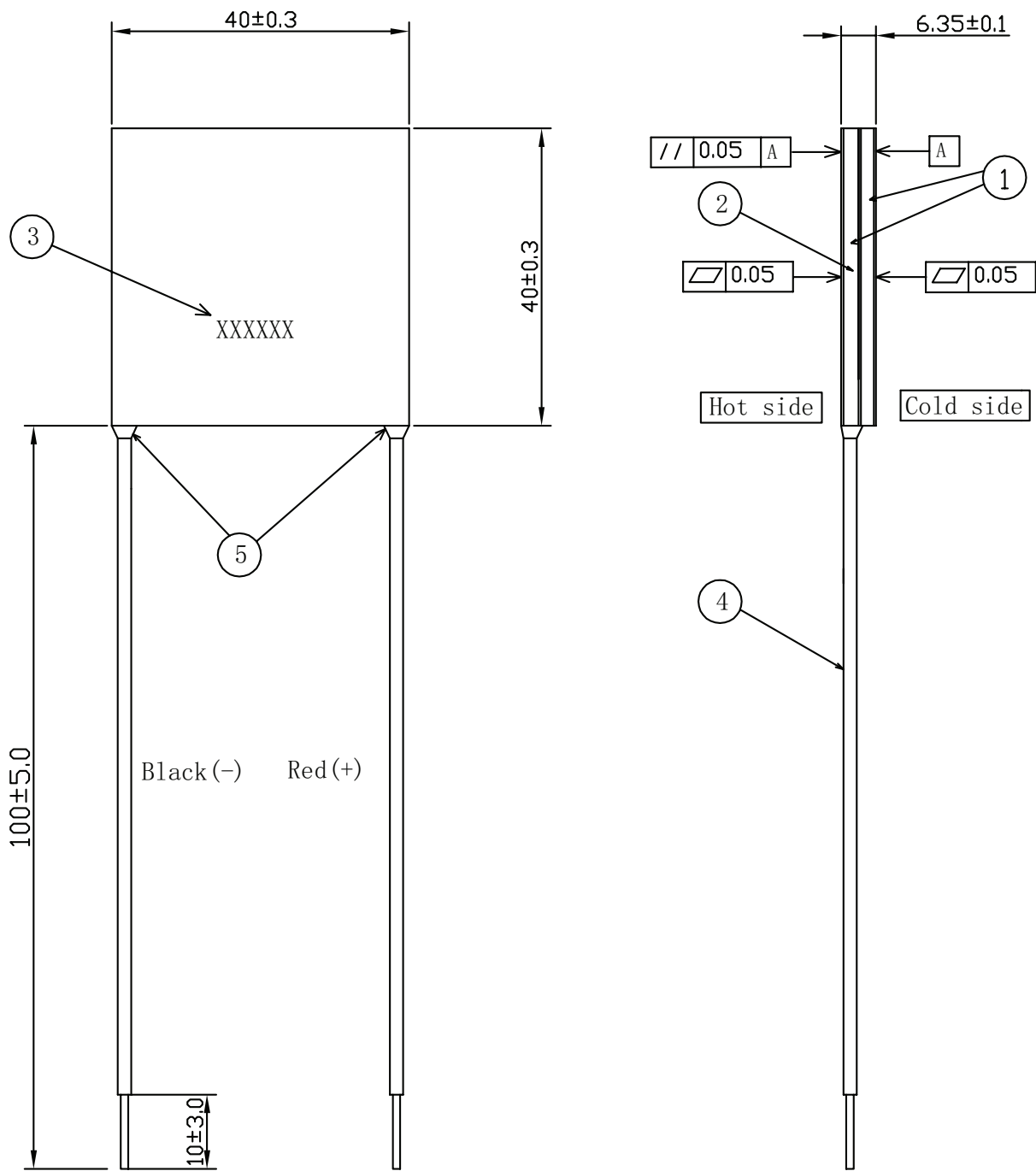
| parameter                              | conditions/description                  | min  | typ  | max  | units    |
|----------------------------------------|-----------------------------------------|------|------|------|----------|
| input voltage <sup>1</sup>             |                                         |      |      | 16.1 | V        |
| input current <sup>2</sup>             |                                         |      |      | 10   | A        |
| internal resistance <sup>3</sup>       |                                         | 1.22 | 1.36 | 1.50 | $\Omega$ |
| Q <sub>max</sub> <sup>4</sup>          | Th = 27°C                               |      |      | 62   | W        |
|                                        | Th = 50°C                               |      |      | 68   | W        |
| $\Delta T$ <sub>max</sub> <sup>5</sup> | Th = 27°C                               |      |      | 85   | °C       |
|                                        | Th = 50°C                               |      |      | 95   | °C       |
| solder melting temperature             | connection between thermoelectric pairs | 235  |      |      | °C       |
| assembly compression                   |                                         |      |      | 1    | MPa      |
| hot side plate                         |                                         |      |      | 100  | °C       |
| RoHS                                   | yes                                     |      |      |      |          |

Notes: 1. Maximum voltage at  $\Delta T$  max and  $T_c = 27^\circ\text{C}$   
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  $I_{\text{max}}$ ,  $V_{\text{max}}$ , and  $\Delta T = 0^\circ\text{C}$   
5. Maximum temperature difference occurs at  $I_{\text{max}}$ ,  $V_{\text{max}}$ , and  $Q = 0$  W ( $\Delta T$  max measured in a vacuum at 1.3 Pa)

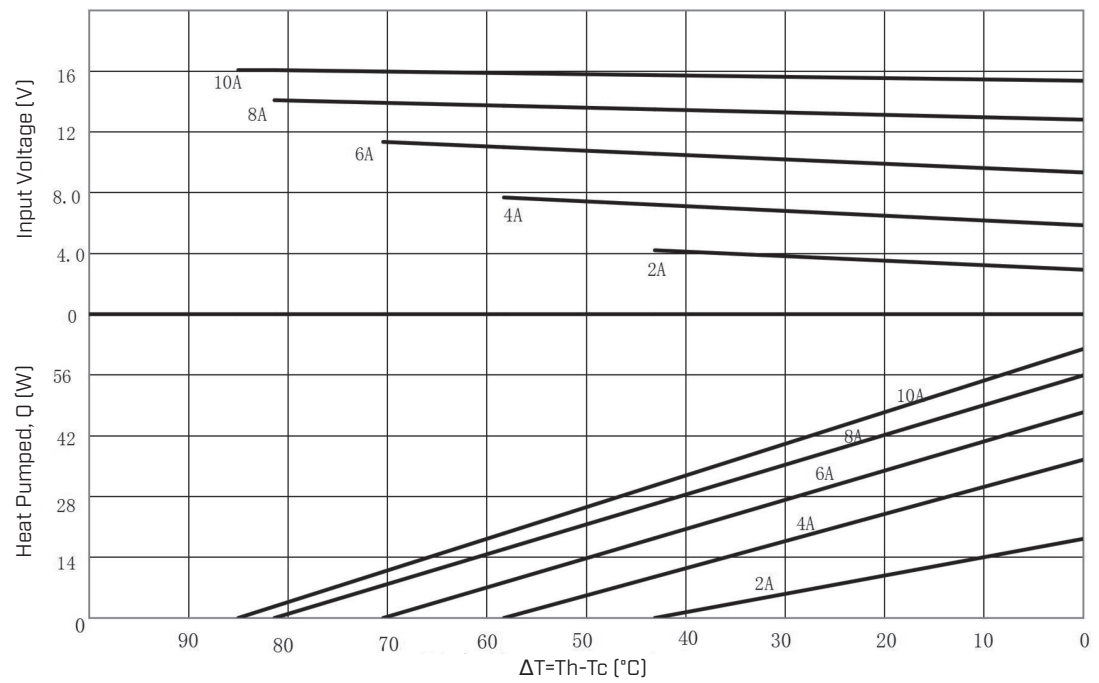
MECHANICAL DRAWING

units: mm

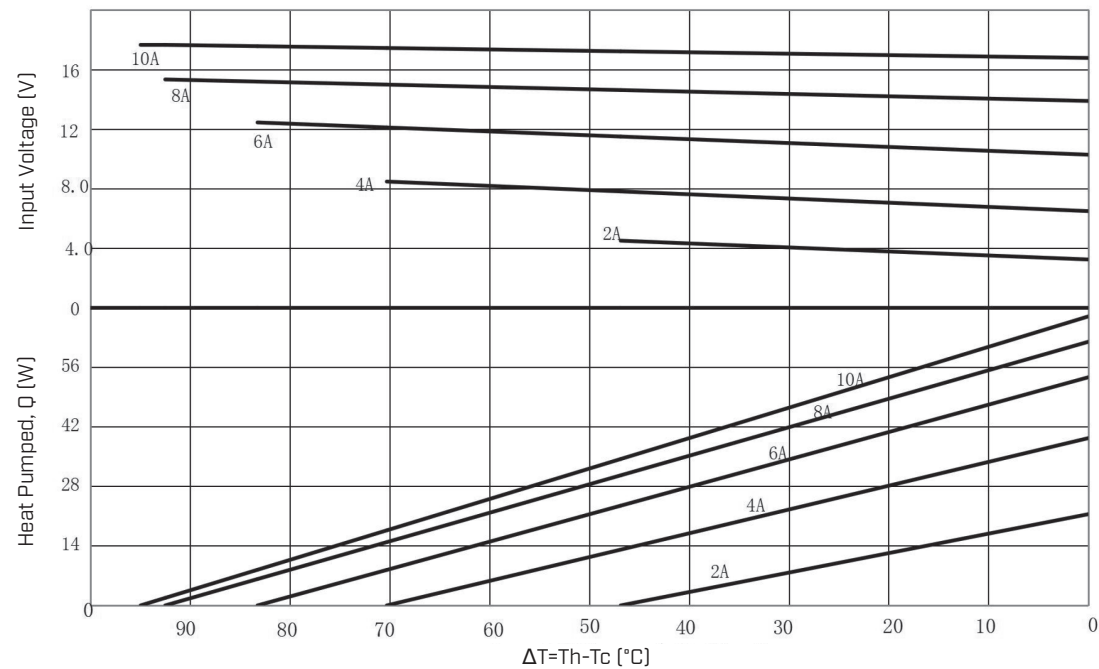
| ITEM | DESCRIPTION   | MATERIAL                                                  | PLATING/COLOR |
|------|---------------|-----------------------------------------------------------|---------------|
| 1    | ceramic plate | 96% AL <sub>2</sub> O <sub>3</sub>                        | white         |
| 2    | sealer        | silicon rubber 703 RTV (between cold and hot side plates) |               |
| 3    | marking       | P/N & S/N printed on cold side surface                    |               |
| 4    | wire leads    | 20 AWG (105°C max)                                        | tin           |
| 5    | joint cover   | silicon rubber 703 RTV                                    |               |



PERFORMANCE (Th=27°C)



PERFORMANCE (Th=50°C)



REVISION HISTORY

| rev. | description     | date       |
|------|-----------------|------------|
| 1.0  | initial release | 10/10/2024 |

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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