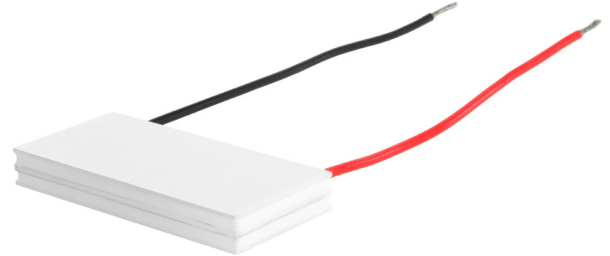



SERIES: CP50-2 | **DESCRIPTION:** PELTIER MODULE

FEATURES

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


MODEL

| | input voltage ¹ | input current ² | internal resistance ³ | output Qmax ⁴ | | output ΔTmax ⁵ | |
|---------------|----------------------------|----------------------------|----------------------------------|-----------------------------|-----------------------------|------------------------------|------------------------------|
| | max [Vdc] | max [A] | typ [Ω±10%] | T _h =27°C [W] | T _h =50°C [W] | T _h =27°C [°C] | T _h =50°C [°C] |
| CP502550665-2 | 12.8 | 5 | 2.4 | 23 | 25 | 82 | 92 |

Notes: 1. Maximum voltage at ΔT max and T_c=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_{max}, V_{max}, and ΔT=0°C
 5. Maximum temperature difference occurs at I_{max}, V_{max}, and Q=0W (ΔT max measured in a vacuum at 1.3 Pa)

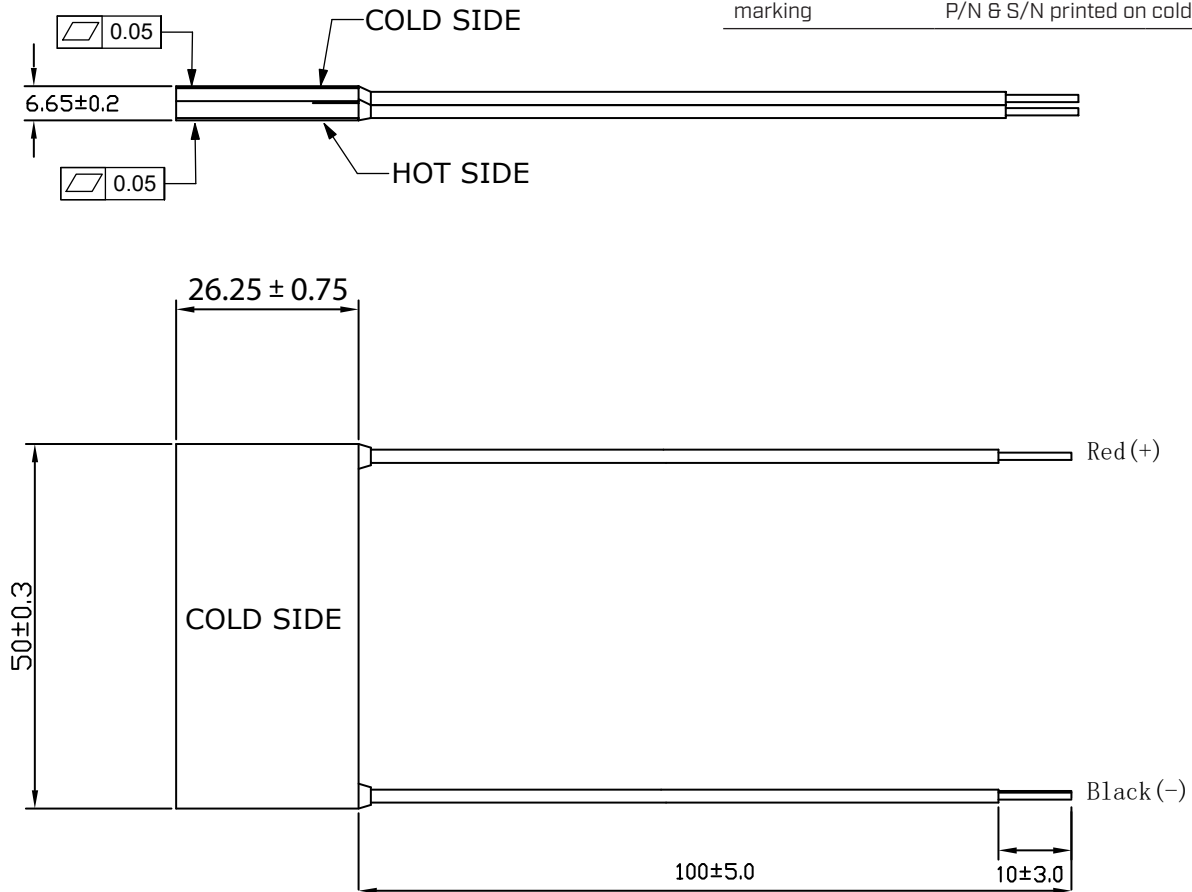
SPECIFICATIONS

| 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 | | | | |

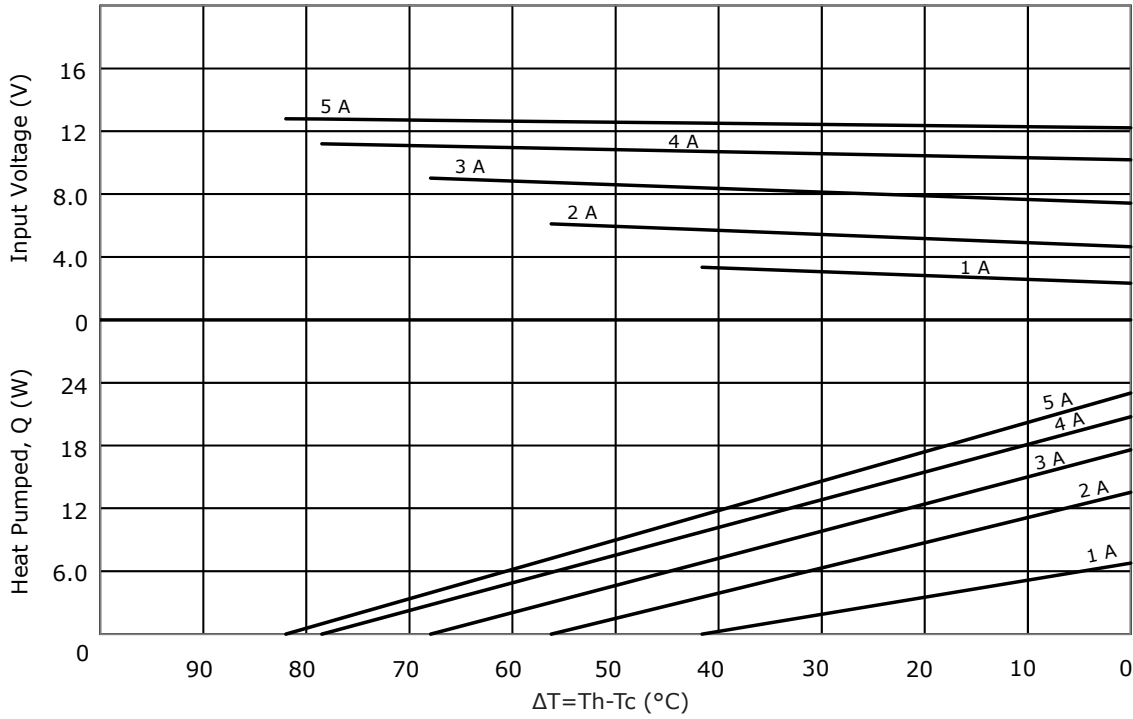
MECHANICAL DRAWING

units: mm

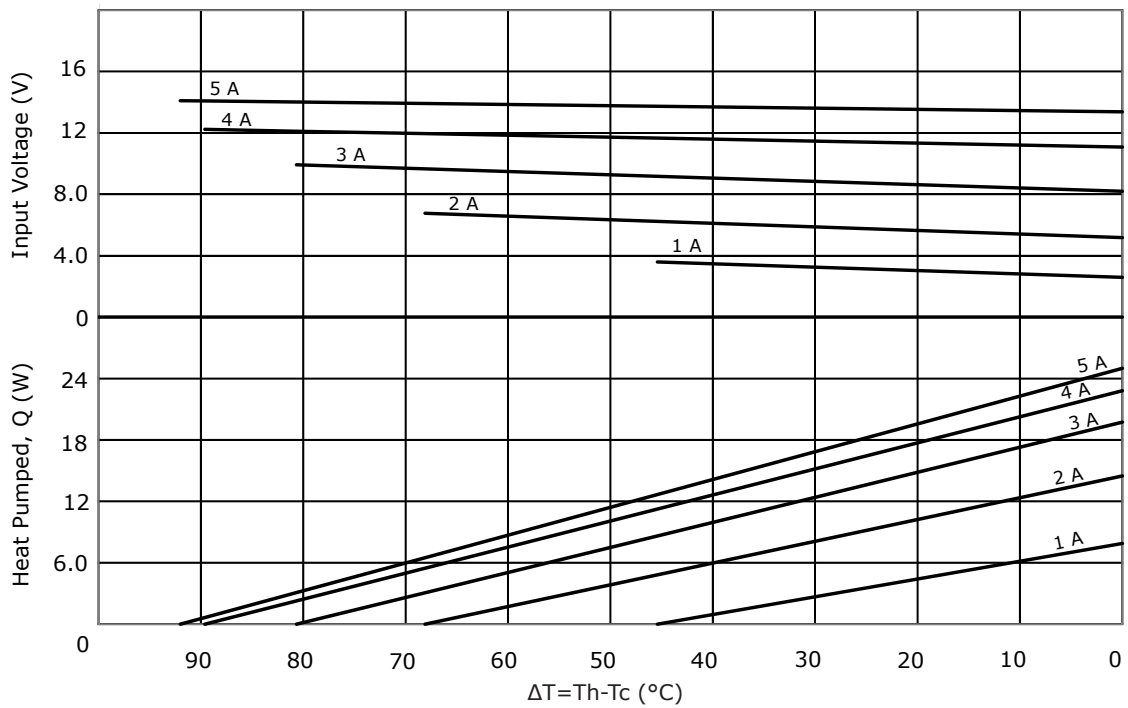
| | MATERIAL | PLATING |
|---------------|---|---------|
| ceramic plate | 96% AL ₂ O ₃ | |
| wire leads | 20 AWG | tin |
| sealer | silicon rubber 703 RTV (between cold and hot side plates) | |
| joint cover | silicon rubber 703 RTV | |
| marking | P/N & S/N printed on cold side surface | |



PERFORMANCE (Th=27°C)



PERFORMANCE (Th=50°C)



REVISION HISTORY

| rev. | description | date |
|------|------------------------------|------------|
| 1.0 | initial release | 05/21/2018 |
| 1.01 | brand update | 10/29/2019 |
| 1.02 | 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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