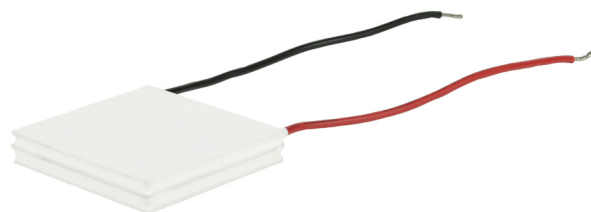


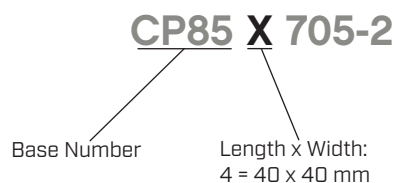
SERIES: CP85-2 | **DESCRIPTION:** PELTIER MODULE**FEATURES**

- solid state device
- 2-stage cooler
- precise temperature control
- quiet operation

**MODEL**

| | input voltage ¹ max [Vdc] | input current ² max [A] | $T_h=27^{\circ}\text{C}$ [W] | output Q_{\max}^3 $T_h=50^{\circ}\text{C}$ [W] | $T_h=27^{\circ}\text{C}$ [°C] | output ΔT_{\max}^4 $T_h=50^{\circ}\text{C}$ [°C] |
|------------|-----------------------------------------------|---------------------------------------------|---------------------------------|-----------------------------------------------------------|----------------------------------|-------------------------------------------------------------------|
| CP854705-2 | 16.1 | 8.5 | 51.6 | 58 | 85 | 95 |

Notes: 1. Maximum voltage at ΔT_{\max} and $T_h=27^{\circ}\text{C}$
 2. Maximum current to achieve ΔT_{\max}
 3. Maximum heat absorbed at cold side occurs at I_{\max} , V_{\max} , and $\Delta T=0^{\circ}\text{C}$
 4. Maximum temperature difference occurs at I_{\max} , V_{\max} , and $Q=0\text{W}$ (ΔT_{\max} measured in a vacuum at 1.3 Pa)

PART NUMBER KEY

SPECIFICATIONS

| parameter | conditions/description | min | typ | max | units |
|----------------------------------|-----------------------------------------|-------|------|-------|--------------------|
| internal resistance ¹ | | 1.485 | 1.65 | 1.815 | Ω |
| solder melting temperature | connection between thermoelectric pairs | 235 | | | $^{\circ}\text{C}$ |
| assembly compression | | | | 1 | MPa |
| hot side plate | | | | 80 | $^{\circ}\text{C}$ |

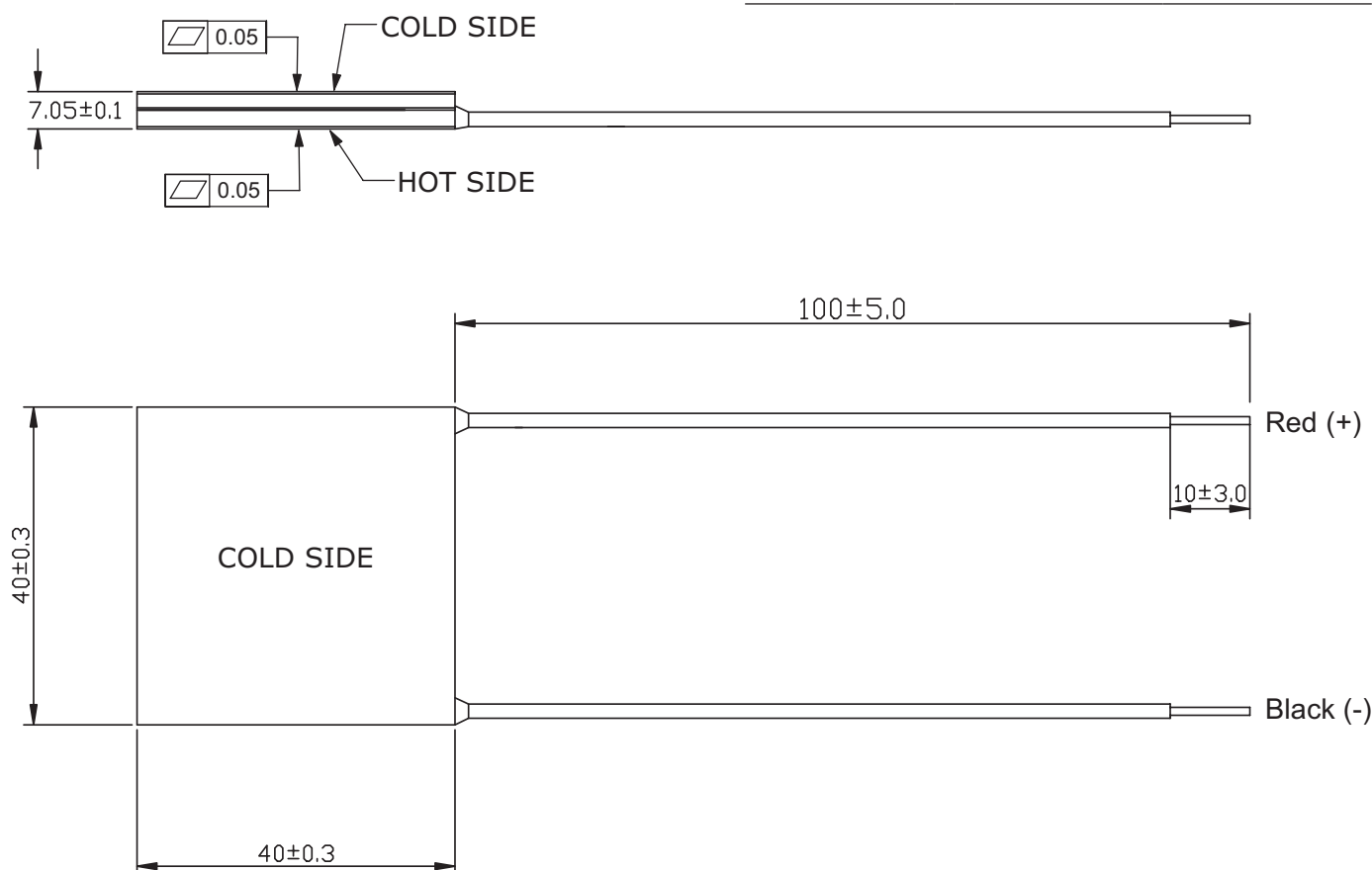
RoHS 2011/65/EU

Note: 1. Measured by AC 4-terminal method at 25 $^{\circ}\text{C}$

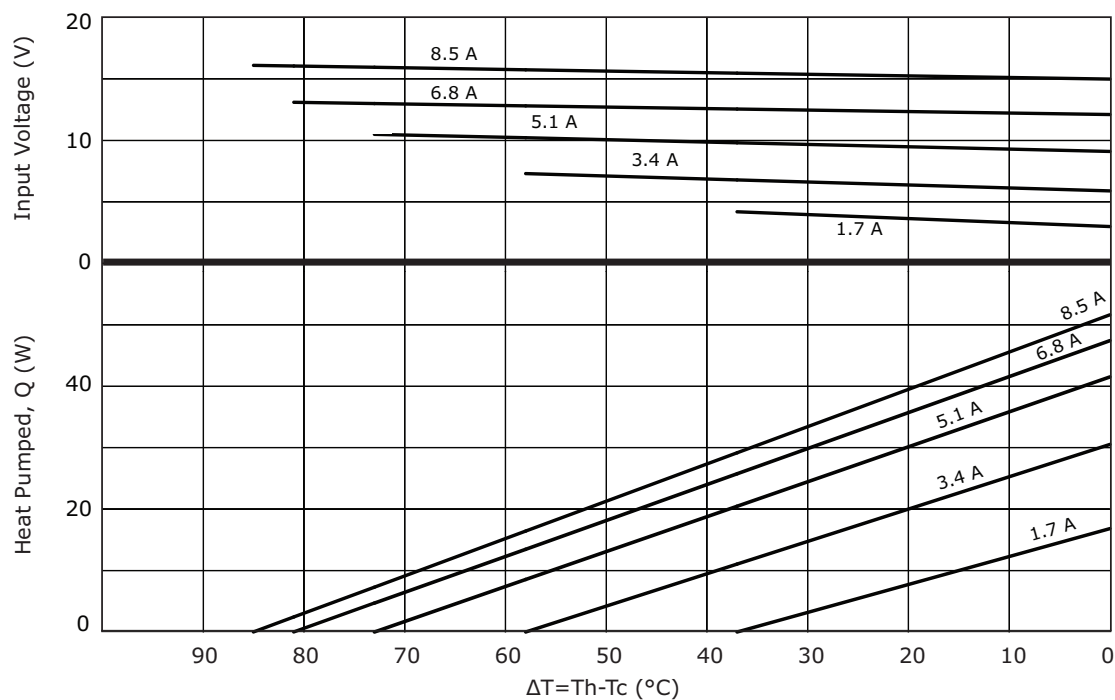
MECHANICAL DRAWING

units: mm

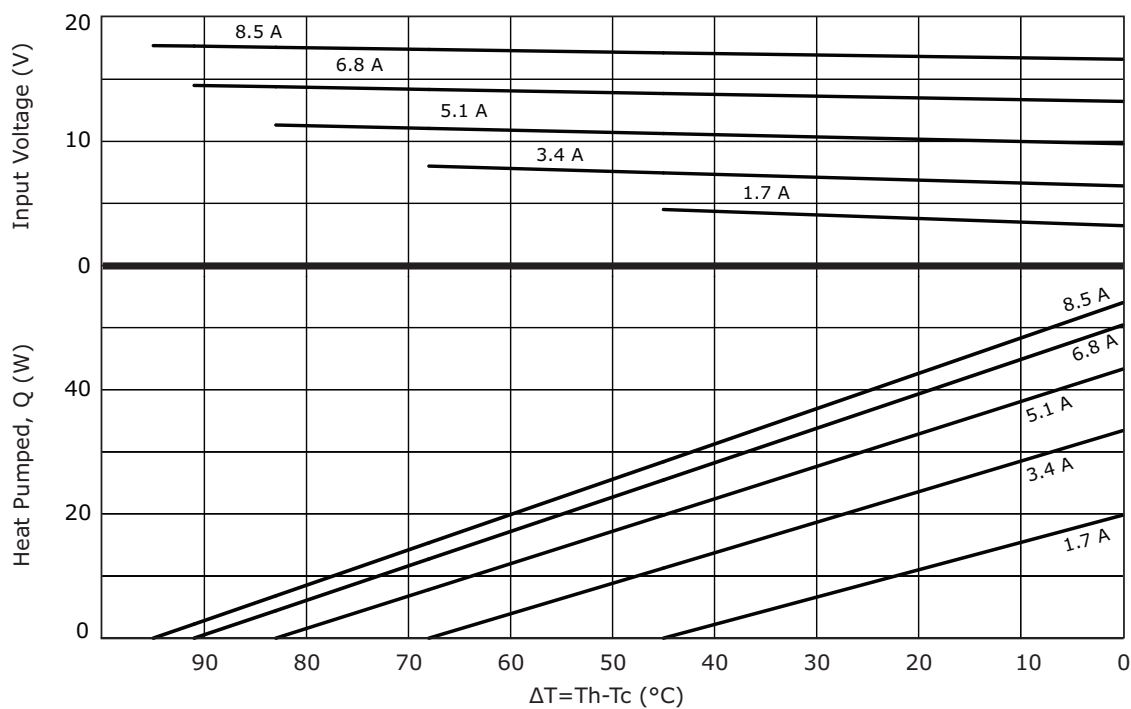
| | MATERIAL | PLATING |
|---------------|-----------------------------------------------------------|---------|
| ceramic plate | 96% AL_2O_3 | |
| wire leads | 20 AWG | tin |
| sealer | silicon tubber 703 RTV (between cold and hot side plates) | |
| joint cover | silicon rubber 703 RTV | |
| marking | 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 | 09/12/2016 |
| 1.01 | brand update | 10/30/2019 |
| 1.02 | updated solder melting point | 08/24/2021 |
| 1.03 | 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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