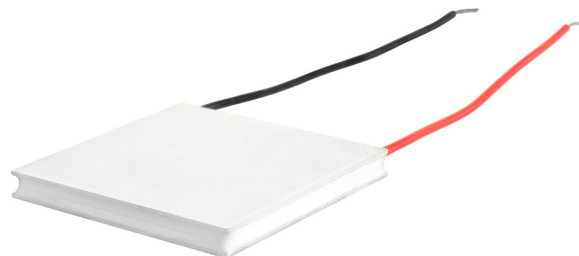


SERIES: CP45H | **DESCRIPTION:** PELTIER MODULE**FEATURES**

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

**MODEL**

| MODEL | input voltage ¹ max (Vdc) | input current ² max (A) | internal resistance ³ typ ($\Omega \pm 10\%$) | output Qmax ⁴ | | output ΔT_{max} ⁵ | |
|-----------|--|--|--|-----------------------------|-----------------------------|--------------------------------------|------------------------------|
| | | | | T _h =27°C (W) | T _h =50°C (W) | T _h =27°C (°C) | T _h =50°C (°C) |
| CP454375 | 19.5 | 4.5 | 3.54 | 50.7 | 55.7 | 70 | 77 |
| CP455535H | 15.7 | 4.5 | 2.5 | 41 | 45 | 70 | 77 |

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

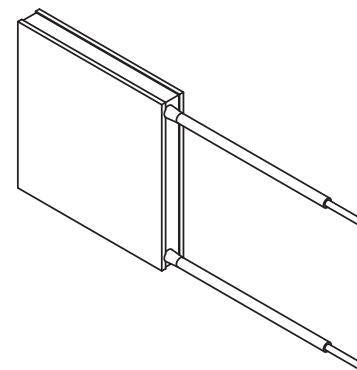
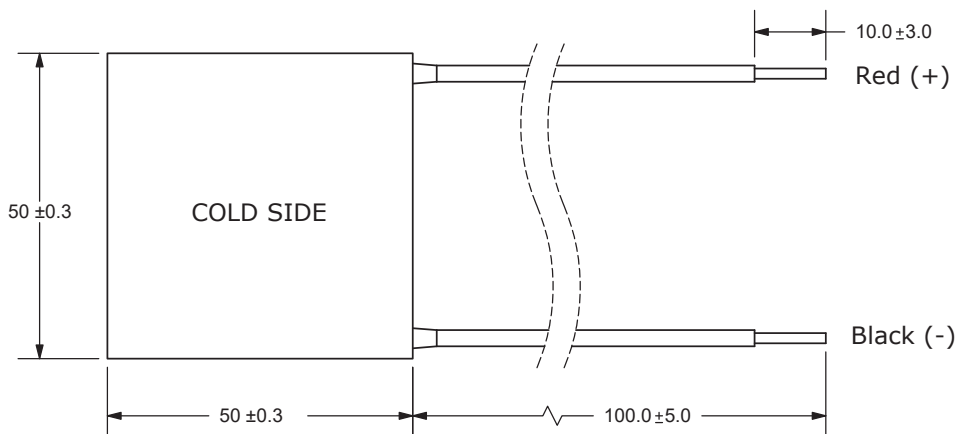
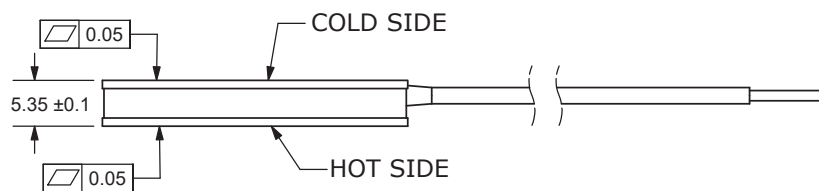
SPECIFICATIONS

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

MECHANICAL DRAWING

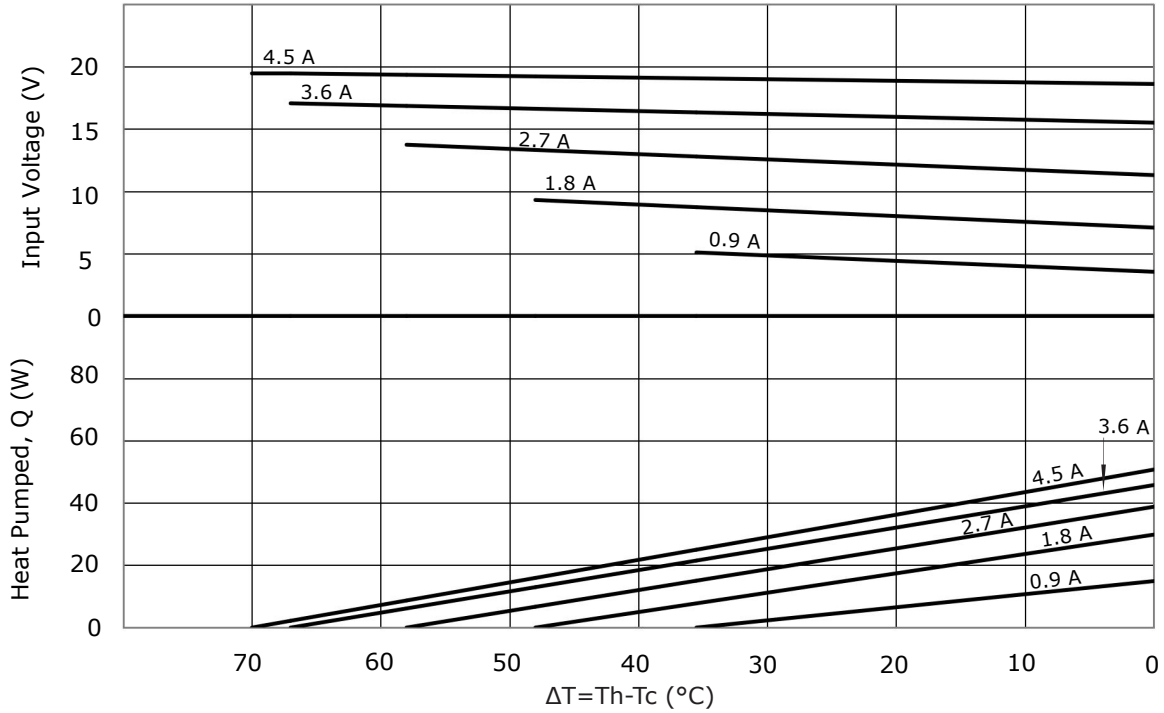
units: mm

| | 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 | |

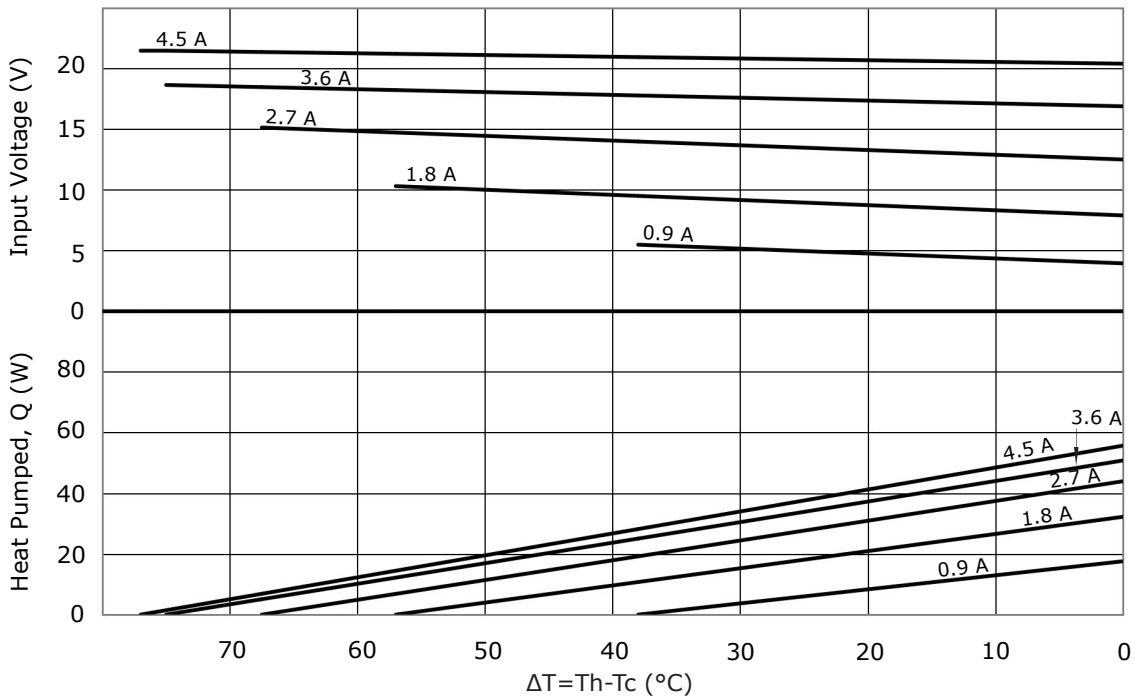


| MODEL NO. | LENGTH (mm) | WIDTH (mm) | THICKNESS (mm) |
|-----------|-------------|------------|----------------|
| CP454375 | 40 ± 0.3 | 40 ± 0.3 | 3.75 ± 0.1 |
| CP455535H | 50 ± 0.3 | 50 ± 0.3 | 5.35 ± 0.1 |

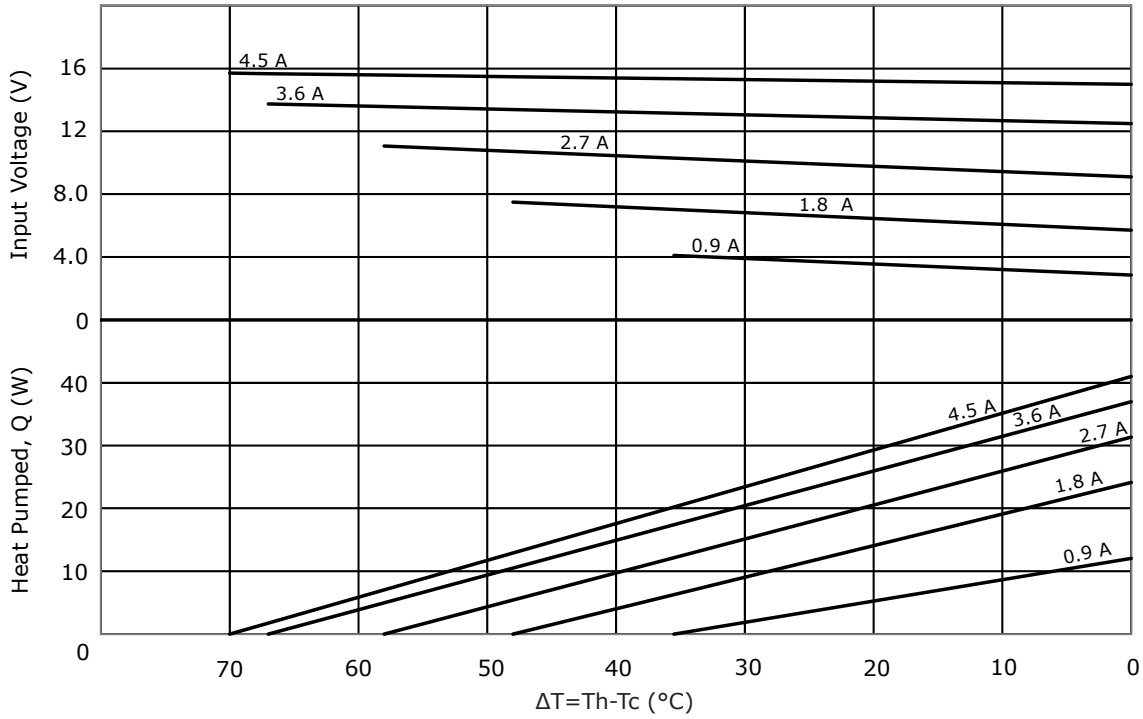
CP454375 PERFORMANCE (Th=27°C)



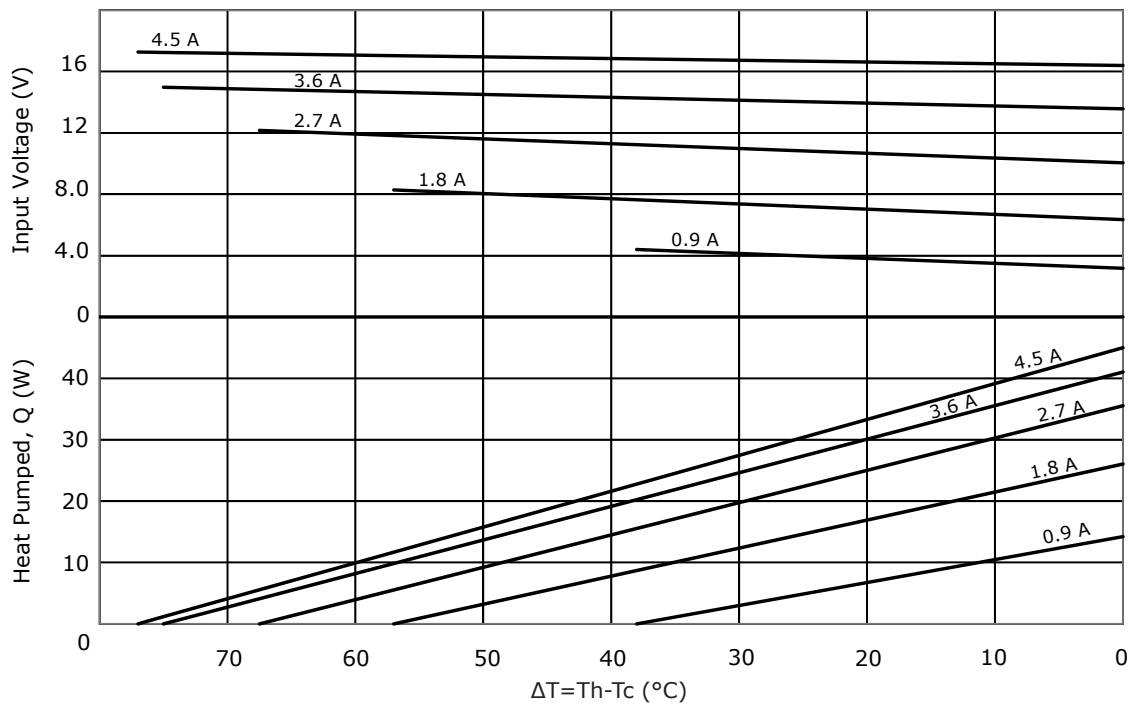
CP454375 PERFORMANCE (Th=50°C)



CP45535H PERFORMANCE (Th=27°C)



CP45535H PERFORMANCE (Th=50°C)



REVISION HISTORY

| rev. | description | date |
|------|------------------------------------|------------|
| 1.0 | initial release | 05/21/2018 |
| 1.01 | added model CP454375, brand update | 10/16/2019 |

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

CUI DEVICES

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

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