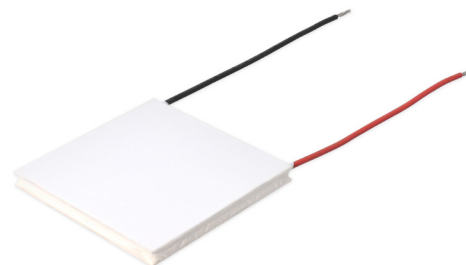


SERIES: CP90H | **DESCRIPTION:** PELTIER MODULE

FEATURES

- arcTEC™ structure on select models
- enhanced reliability for high thermal cycling
- superior thermal performance
- silicon sealed
- wide ΔT_{max}
- low profile
- precise temperature control
- solid state construction


MODEL

| | input voltage ¹ | input current ² | internal resistance ³ | output Qmax ⁴ | | output ΔT_{max} ⁵ | |
|-------------------------|----------------------------|----------------------------|----------------------------------|-------------------------------|-------------------------------|--|--|
| | max [Vdc] | max [A] | typ [$\Omega \pm 10\%$] | $T_h=27^\circ\text{C}$ [W] | $T_h=50^\circ\text{C}$ [W] | $T_h=27^\circ\text{C}$ [$^\circ\text{C}$] | $T_h=50^\circ\text{C}$ [$^\circ\text{C}$] |
| CP902015343H | 3.6 | 9.0 | 0.3±0.05 | 19.2 | 22.2 | 68 | 75 |
| CP9040335H ⁶ | 15.4 | 9.0 | 1.29 | 79 | 92 | 70 | 77 |
| CP90626257 ⁶ | 15.4 | 9.0 | 1.31 | 79 | 92 | 70 | 77 |

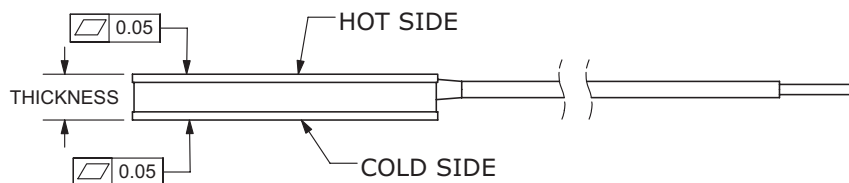
- Notes:
1. Maximum voltage at ΔT_{max} and $T_h=27^\circ\text{C}$
 2. Maximum current to achieve ΔT_{max}
 3. Measured by AC 4-terminal method at 25°C
 4. Maximum heat absorbed at cold side occurs at I_{max} , V_{max} , and $\Delta T=0^\circ\text{C}$
 5. Maximum temperature difference occurs at I_{max} , V_{max} , and $Q=0\text{W}$ (ΔT_{max} measured in a vacuum at 1.3 Pa)
 6. Designed with arcTEC™ structure.

SPECIFICATIONS

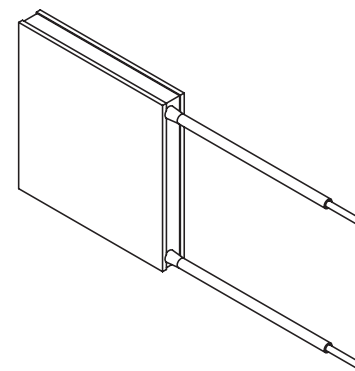
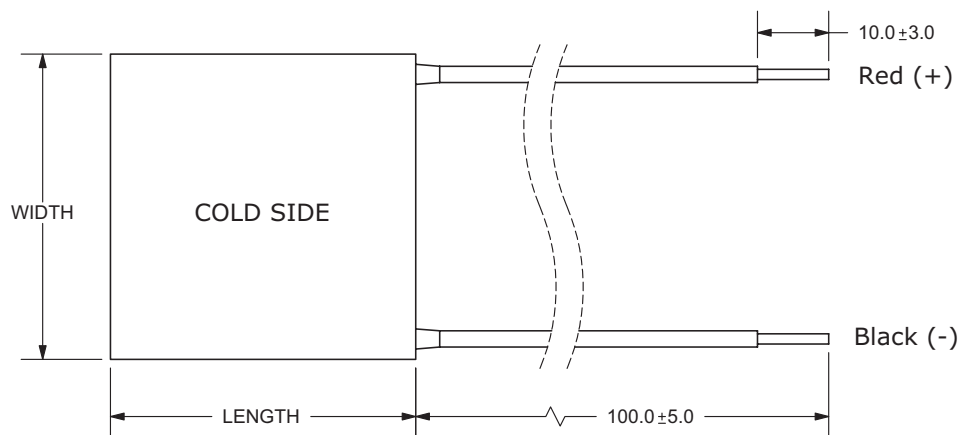
| parameter | conditions/description | min | typ | max | units |
|----------------------------|---|-----|-----|-----|-------|
| solder melting temperature | connection between thermoelectric pairs | 235 | | | °C |
| assembly compression | | | | 1 | MPa |
| RoHS | yes | | | | |

MECHANICAL DRAWING

units: mm

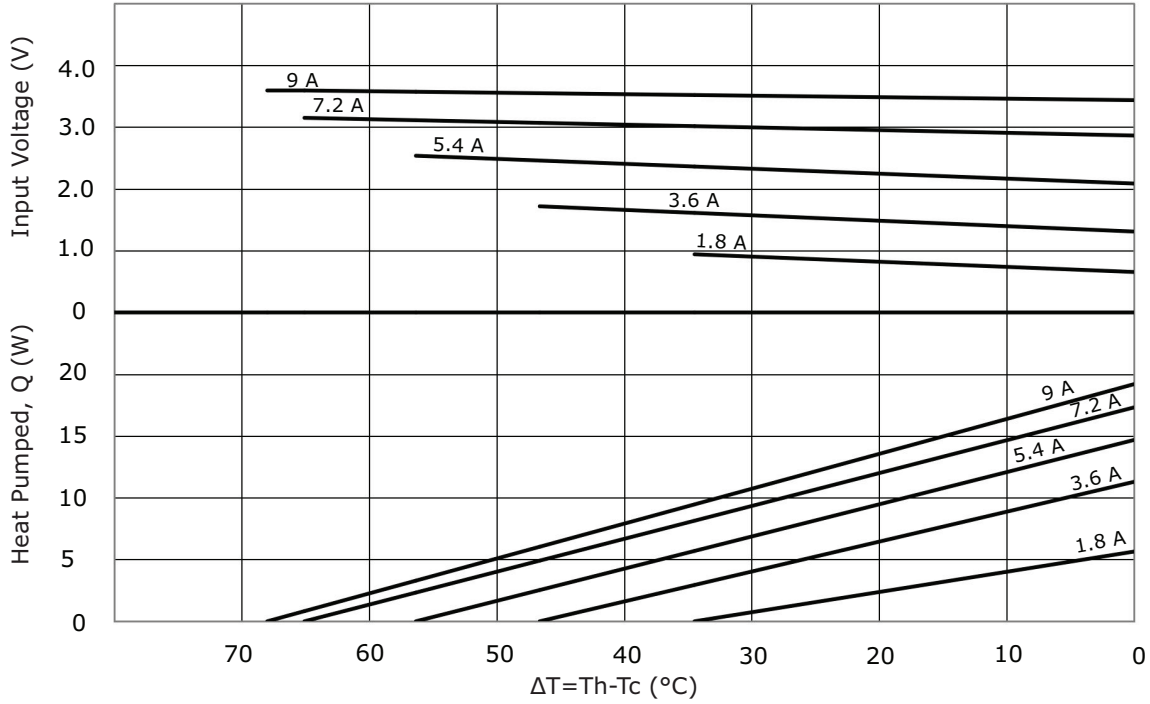


| | MATERIAL | PLATING |
|-------------------------------|---|---------|
| ceramic plate | 96% AL ₂ O ₃ | |
| wire leads (CP90626257) | 18 AWG | tin |
| wire leads (all other models) | 20 AWG | tin |
| sealer | silicon rubber 703 RTV (between cold and hot side plates) | |
| joint cover | silicon rubber 703 RTV | |
| marking | P/N & S/N printed on cold side surface | |

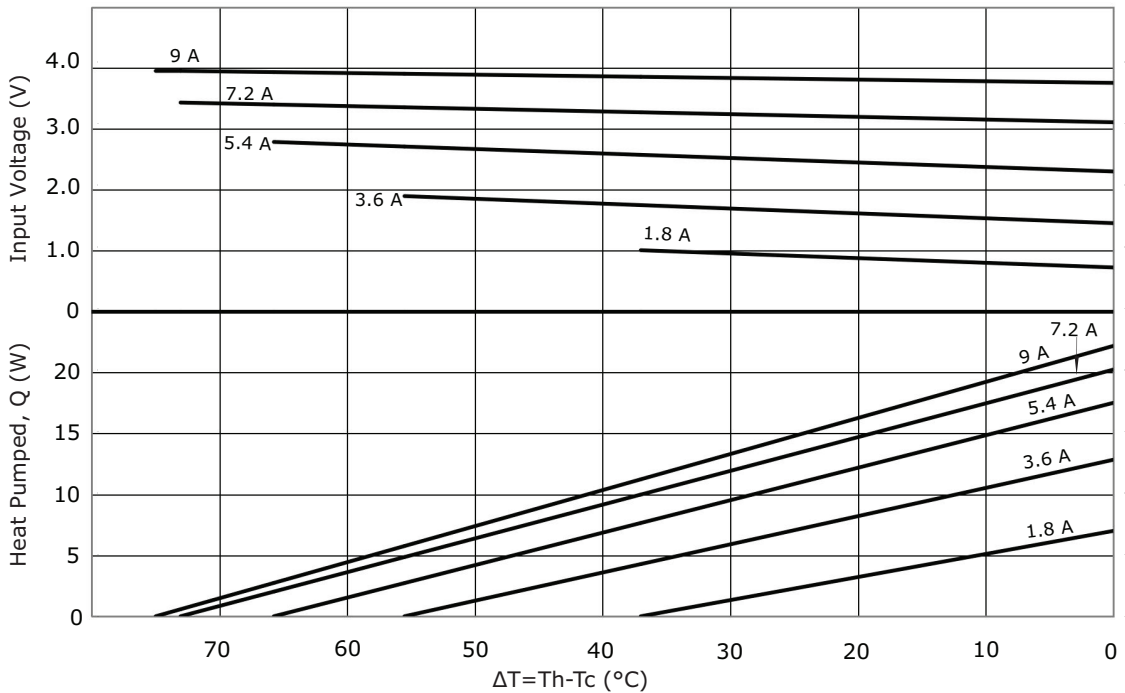


| MODEL NO. | LENGTH (mm) | WIDTH (mm) | THICKNESS (mm) |
|--------------|-------------|------------|----------------|
| CP902015343H | 20 ±0.3 | 15 ±0.3 | 3.43 ±0.03 |
| CP9040335H | 40 ±0.3 | 40 ±0.3 | 3.35 ±0.025 |
| CP90626257 | 62 ±0.3 | 62 ±0.3 | 5.7 ±0.05 |

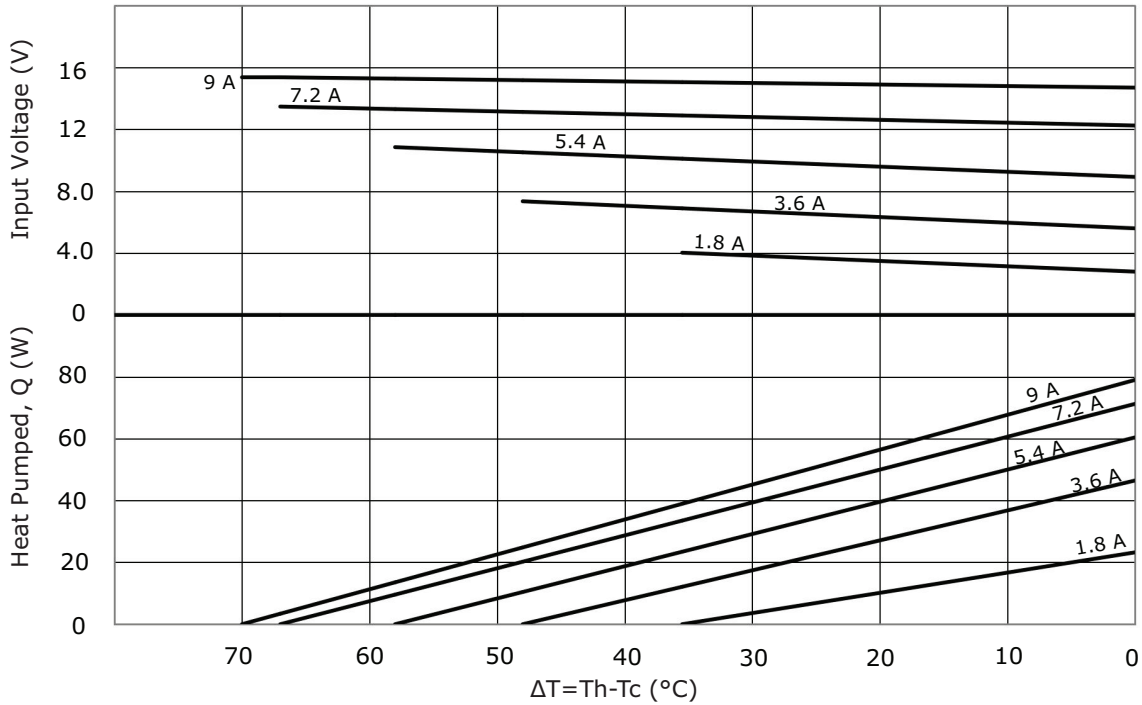
CP902015343H PERFORMANCE (Th=27°C)



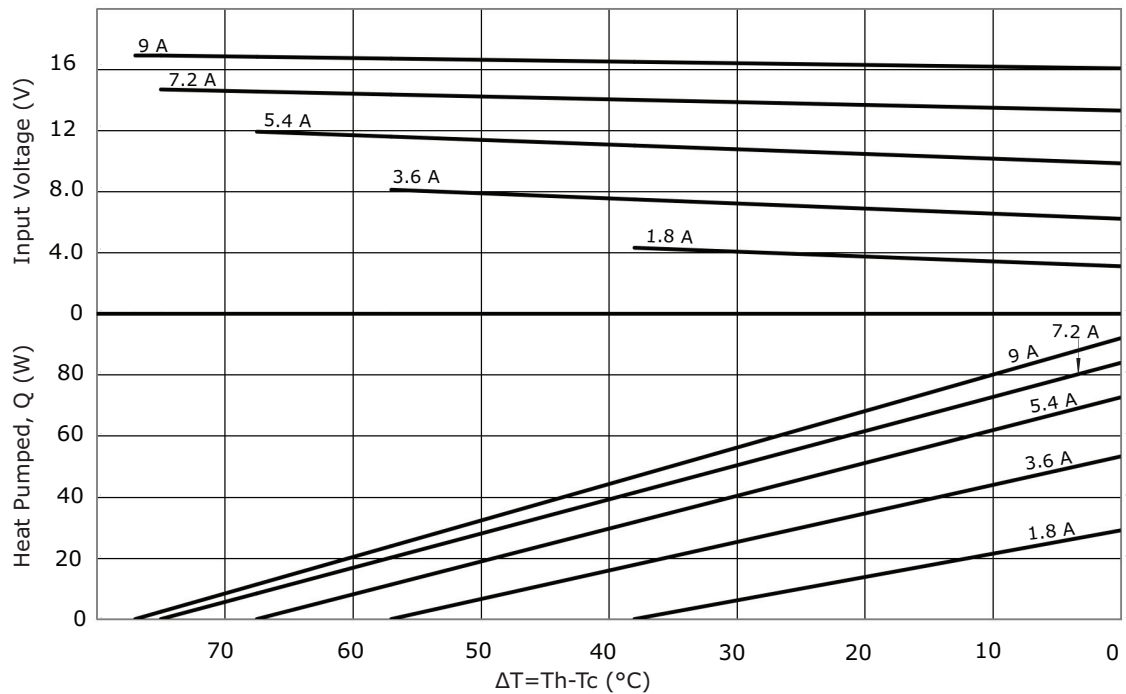
CP902015343H PERFORMANCE (Th=50°C)



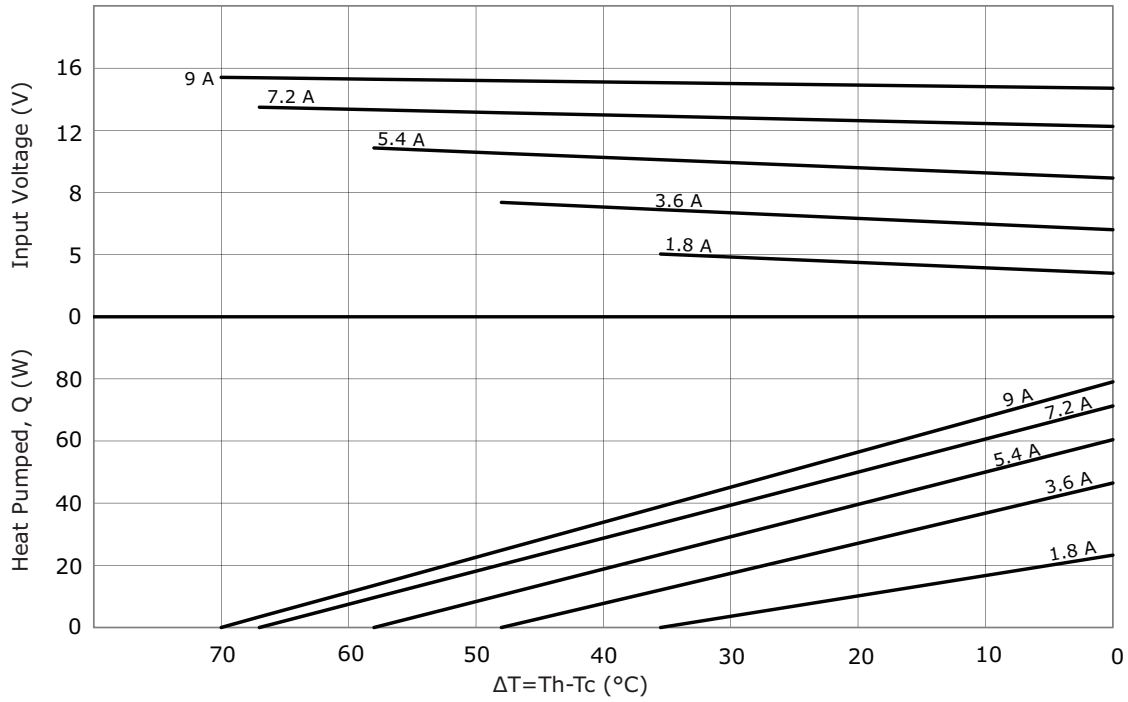
CP9040335H PERFORMANCE (Th=27°C)



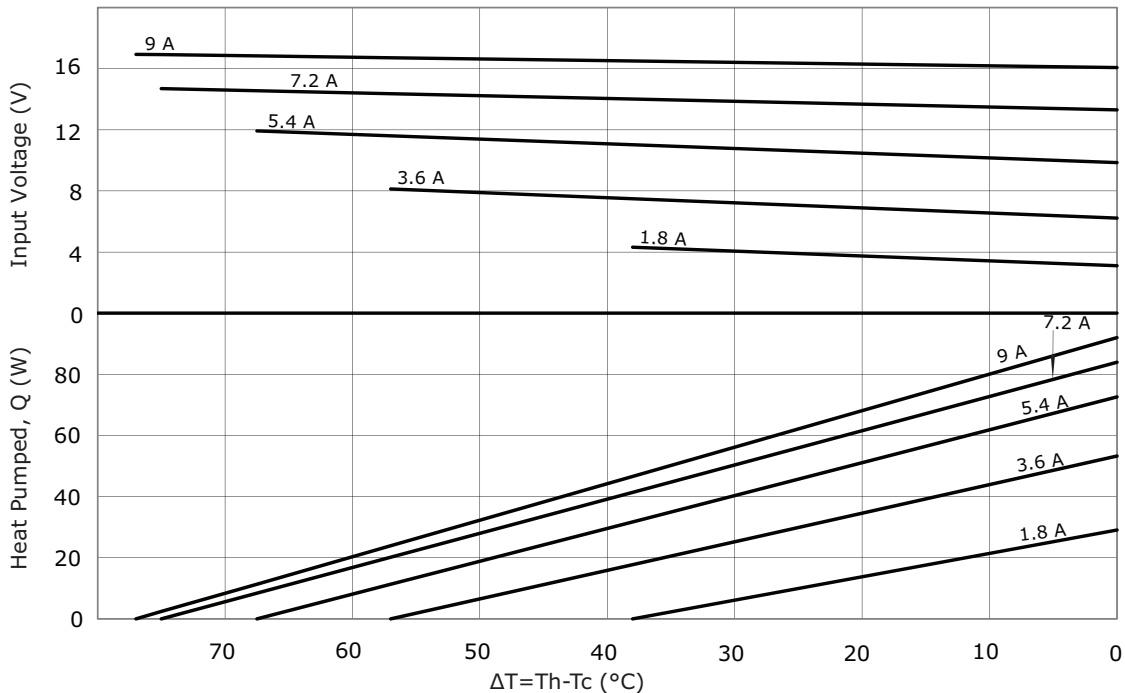
CP9040335H PERFORMANCE (Th=50°C)



CP90626257 PERFORMANCE (Th=27°C)



CP90626257 PERFORMANCE (Th=50°C)



REVISION HISTORY

| rev. | description | date |
|------|--|------------|
| 1.0 | initial release | 10/16/2019 |
| 1.01 | added models CP902015343H & CP9040335H | 11/12/2020 |
| 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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