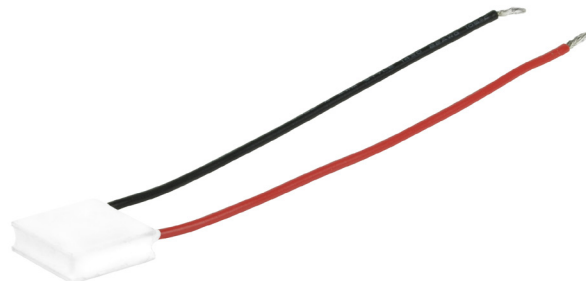


SERIES: CP20 | **DESCRIPTION:** PELTIER MODULE**FEATURES**

- solid state device
- small and lightweight
- precise temperature control
- quiet 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) |
| CP20151 | 3.8 | 2 | 1.6 | 3.7 | 4.0 | 66 | 72 |
| CP20251 | 8.6 | 2 | 3.5 | 8.5 | 9.4 | 66 | 72 |
| CP20351 | 15.4 | 2 | 6.7 | 15.2 | 16.9 | 66 | 72 |

Notes:

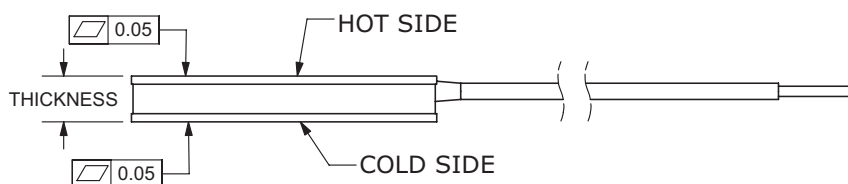
1. Maximum voltage at ΔT_{max} and T_h=27°C
2. Maximum current to achieve ΔT_{max}
3. Measured by AC 4-terminal method at 25°C
4. Maximum heat absorbed at cold side occurs at I_{max}, V_{max}, and $\Delta T=0^\circ\text{C}$
5. Maximum temperature difference occurs at I_{max}, V_{max}, and Q=0W (ΔT_{max}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

SPECIFICATIONS

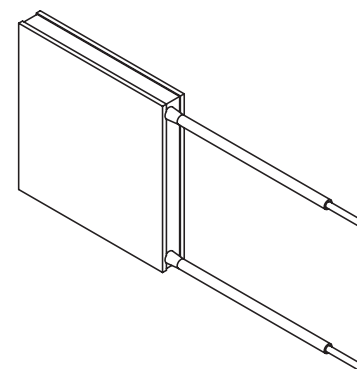
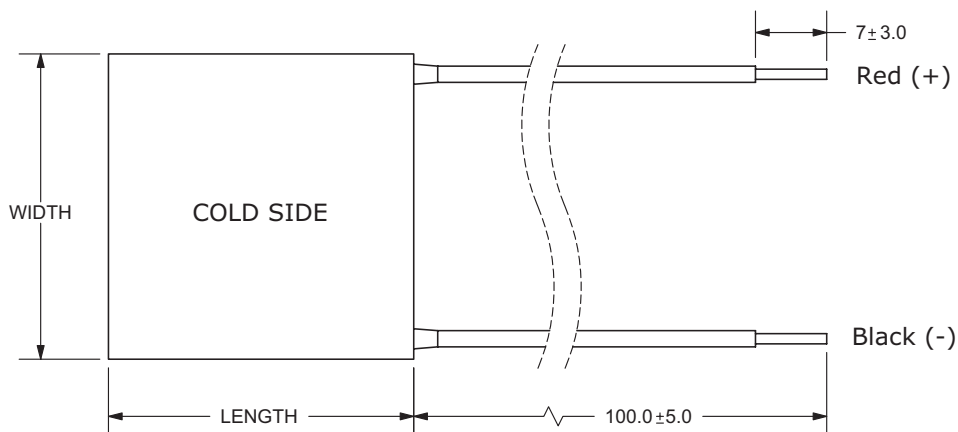
| parameter | conditions/description | min | typ | max | units |
|----------------------------|---|-----|-----|-----|-------|
| solder melting temperature | connection between thermoelectric pairs | 235 | | | °C |
| assembly compression | | | | 1 | MPa |
| hot side plate | | | | 80 | °C |
| RoHS | yes | | | | |

MECHANICAL DRAWING

units: mm

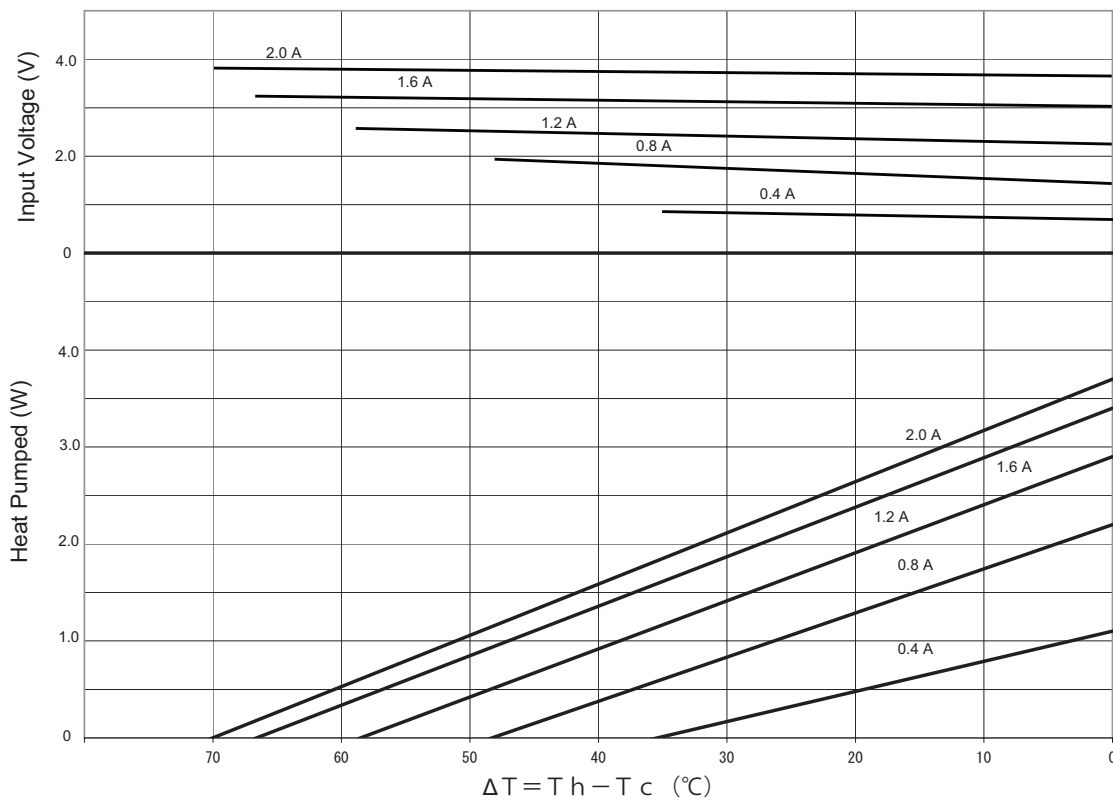


| | MATERIAL | PLATING |
|---------------|---|---------|
| ceramic plate | 96% AL ₂ O ₃ | |
| wire leads | 22 AWG | tin |
| sealer | silicon rubber 703 RTV (between cold and hot side plates) | |
| joint cover | silicon rubber 703 RTV | |
| marking | P/N & S/N printed on cold side surface | |

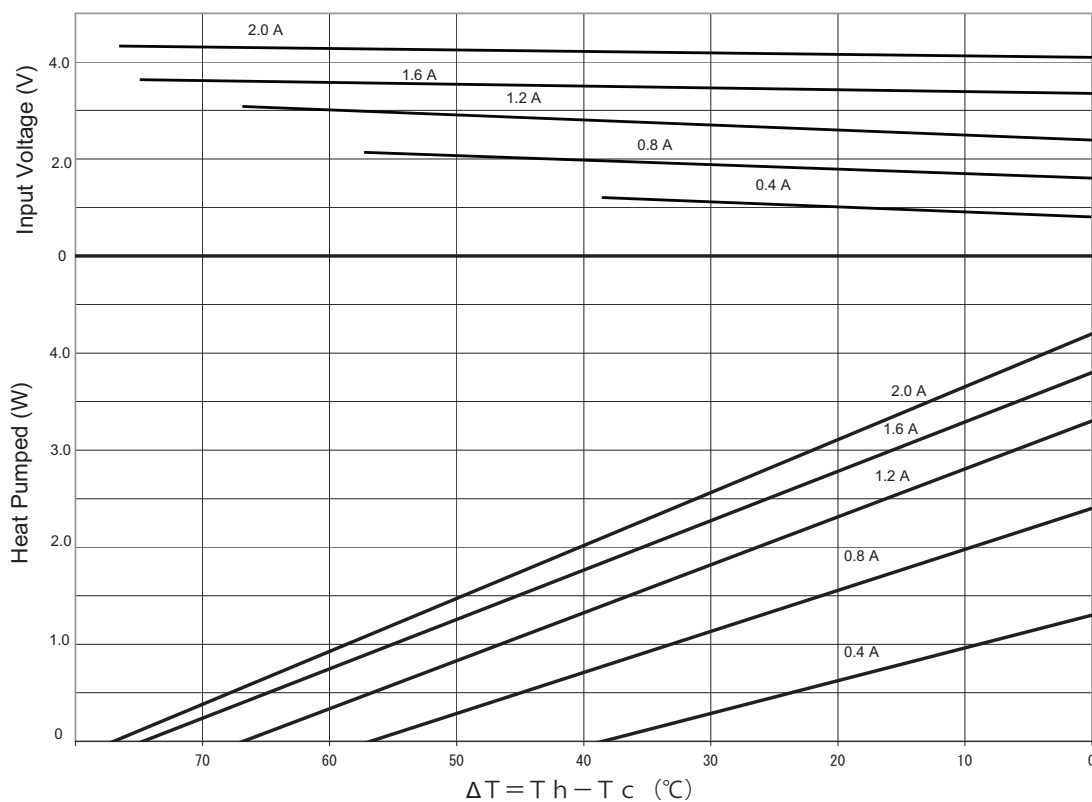


| MODEL NO. | LENGTH (mm) | WIDTH (mm) | THICKNESS (mm) |
|-----------|-------------|------------|----------------|
| CP20151 | 15 ± 0.3 | 15 ± 0.3 | 5.02 ± 0.1 |
| CP20251 | 20 ± 0.3 | 20 ± 0.3 | 5.02 ± 0.1 |
| CP20351 | 30 ± 0.3 | 30 ± 0.3 | 5.02 ± 0.1 |

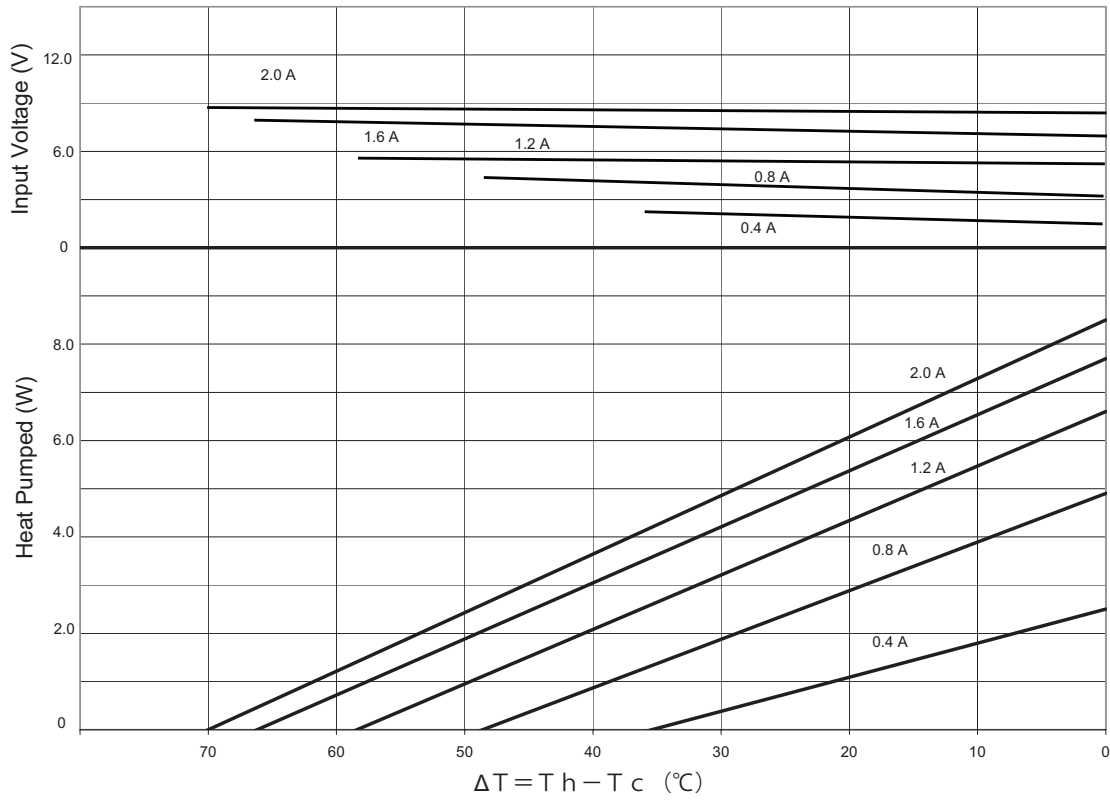
CP20151 PERFORMANCE (Th=27°C)



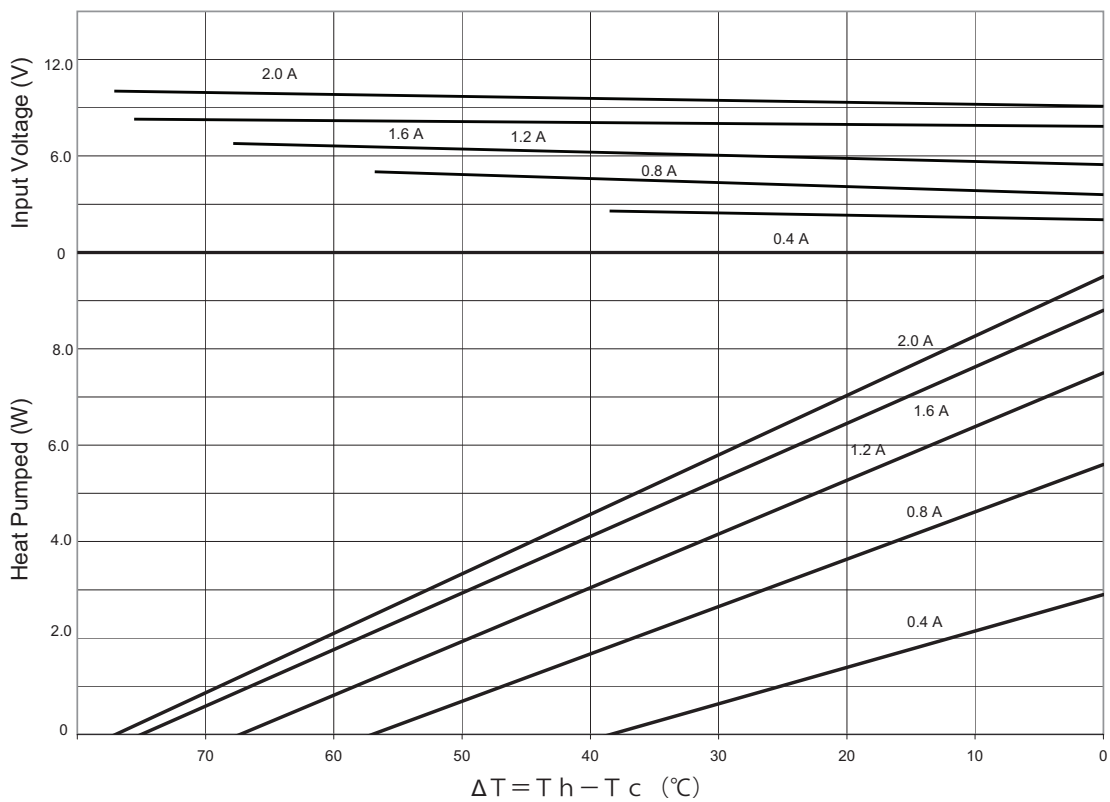
CP20151 PERFORMANCE (Th=50°C)



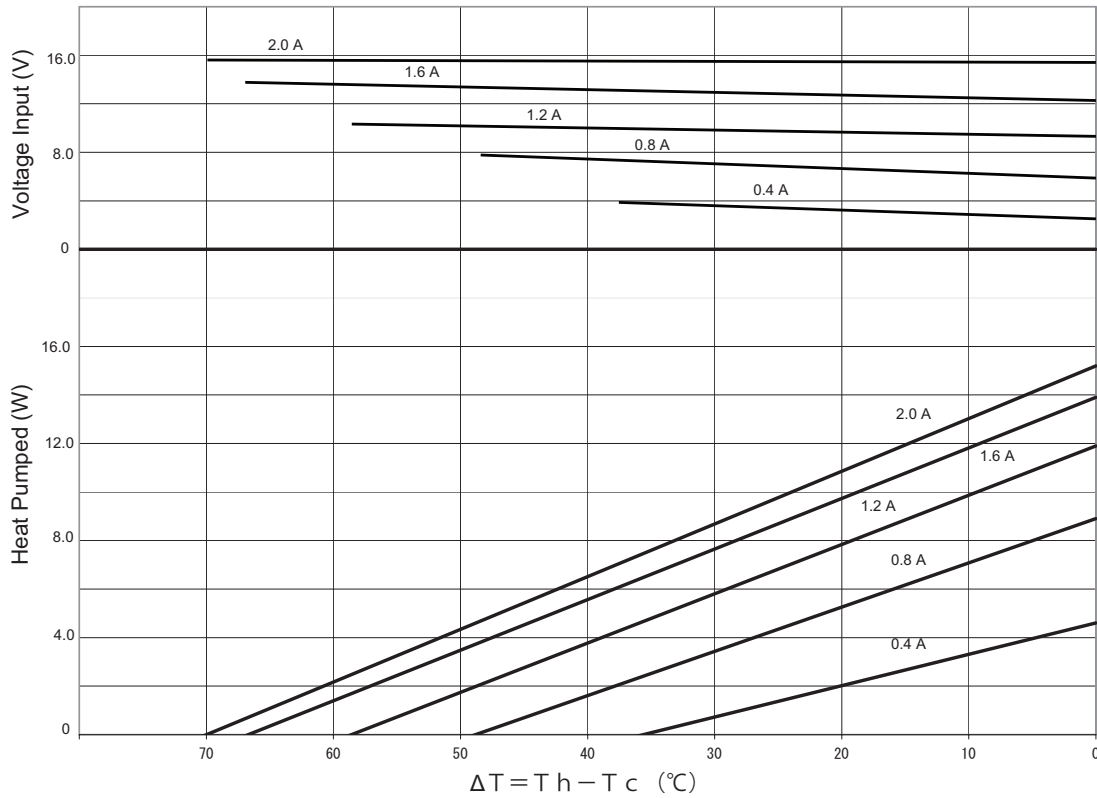
CP20251 PERFORMANCE (Th=27°C)



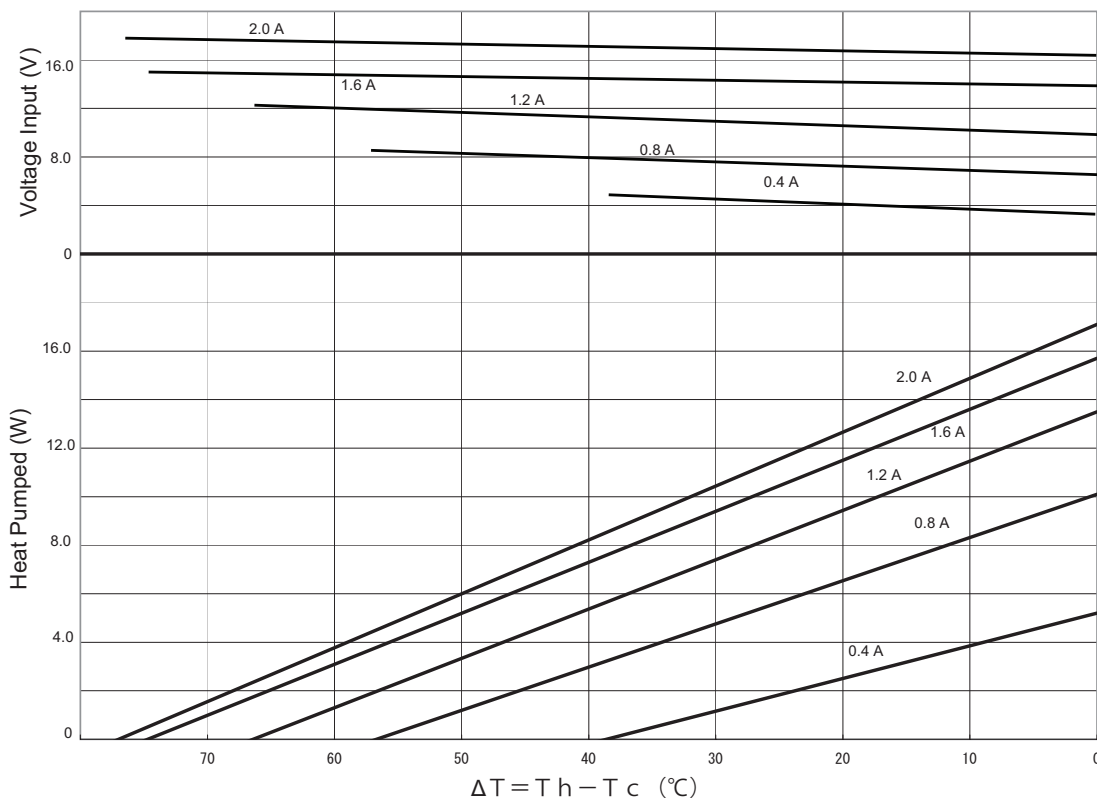
CP20251 PERFORMANCE (Th=50°C)



CP20351 PERFORMANCE (Th=27°C)



CP20351 PERFORMANCE (Th=50°C)



REVISION HISTORY

| rev. | description | date |
|------|---------------------------------|------------|
| 1.0 | initial release | 09/03/2009 |
| 1.01 | applied new template | 05/07/2012 |
| 1.02 | changed thickness of all models | 09/20/2018 |
| 1.03 | brand update | 10/28/2019 |

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

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