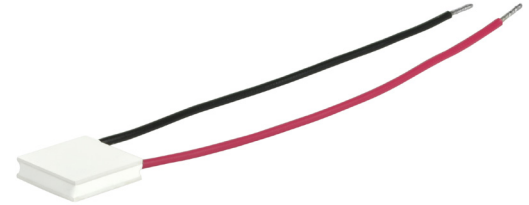




SERIES: CP70 | **DESCRIPTION:** PELTIER MODULE

FEATURES

- arcTEC™ structure on select models
- solid state device
- precise temperature control
- quiet operation



MODEL

| | input voltage ¹ max [Vdc] | input current ² max [A] | internal resistance ³ typ [Ω±10%] | output Qmax ⁴ | | output ΔTmax ⁵ | |
|----------------------|--|--|--|-----------------------------|-----------------------------|------------------------------|------------------------------|
| | | | | T _n =27°C [W] | T _n =50°C [W] | T _h =27°C [°C] | T _h =50°C [°C] |
| CP70137 | 2.1 | 7.0 | 0.24 | 7.5 | 8.3 | 68 | 75 |
| CP70237 | 3.8 | 7.0 | 0.42 | 13.6 | 15.1 | 68 | 75 |
| CP70301537 | 4.2 | 7.0 | 0.48 | 15.4 | 17.1 | 68 | 75 |
| CP70337 ⁶ | 8.6 | 7.0 | 1.0 | 31.0 | 34.6 | 70 | 77 |
| CP70437 ⁶ | 15.4 | 7.0 | 1.75 | 55.0 | 60.5 | 70 | 77 |

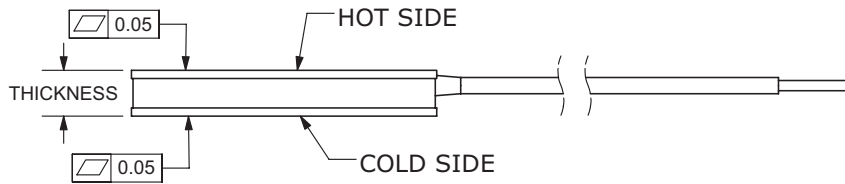
- Notes:
1. Maximum voltage at ΔT max and T_n=27°C
 2. Maximum current to achieve ΔT max
 3. Measured by AC 4-terminal method at 25°C
 4. Maximum heat absorbed at cold side occurs at I_{max}, V_{max}, and ΔT=0°C
 5. Maximum temperature difference occurs at I_{max}, V_{max}, and Q=0W (ΔT max measured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

SPECIFICATIONS

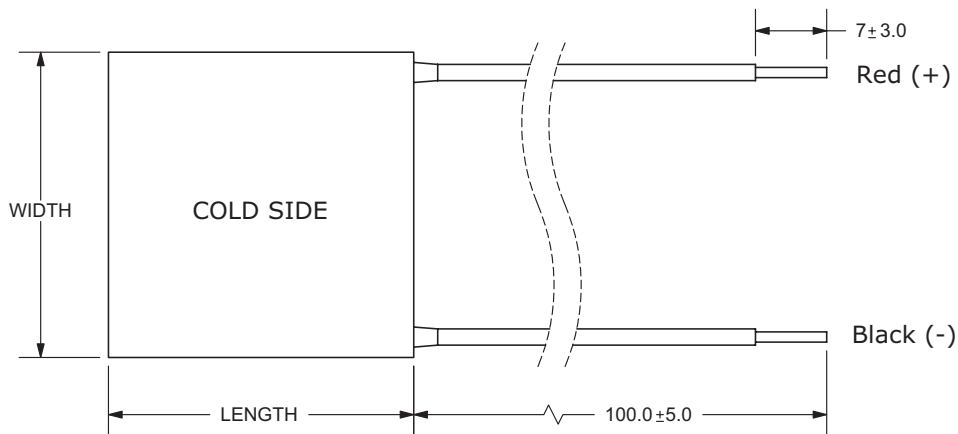
| parameter | conditions/description | min | typ | max | units |
|----------------------------|---|-----|-----|-----|-------|
| solder melting temperature | connection between thermoelectric pairs | 235 | | | °C |
| assembly compression | | | | 1 | MPa |
| hot side plate | | | | 80 | °C |
| RoHS | yes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

MECHANICAL DRAWING

units: mm



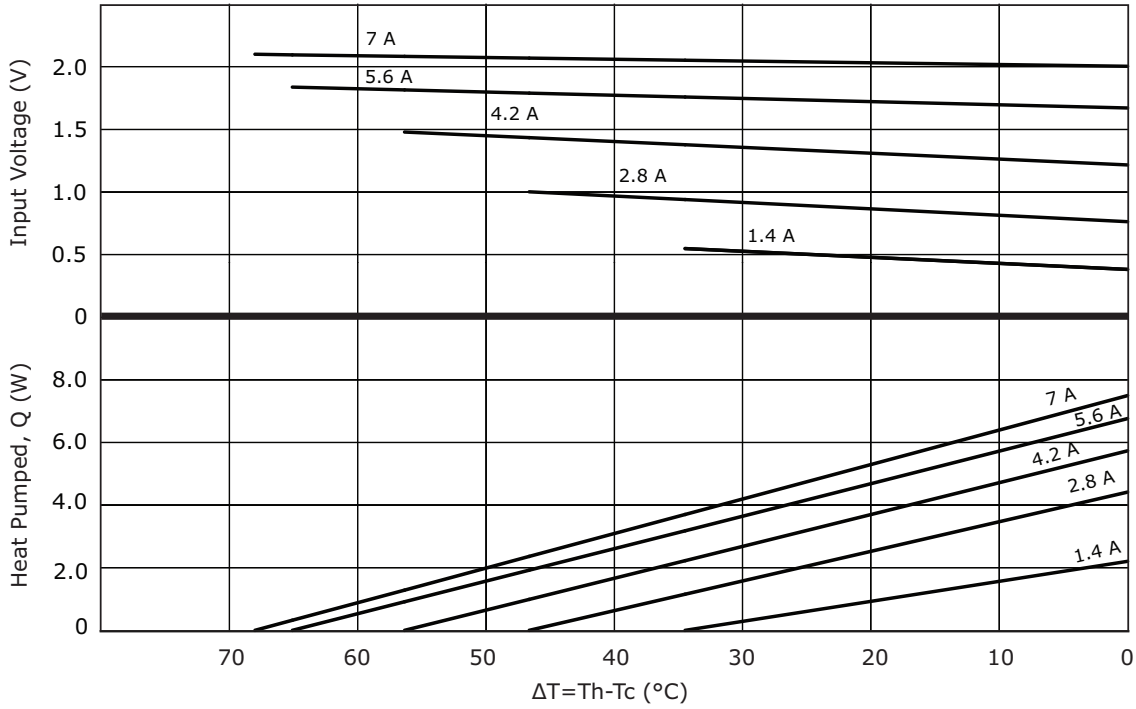
| | MATERIAL | PLATING |
|---------------|---|---------|
| ceramic plate | 96% Al_2O_3 | |
| wire leads | 20 AWG | tin |
| sealer | silicon rubber 703 RTV (between cold and hot side plates) | |
| joint cover | silicon rubber 703 RTV | |
| marking | P/N & S/N printed on cold side surface | |



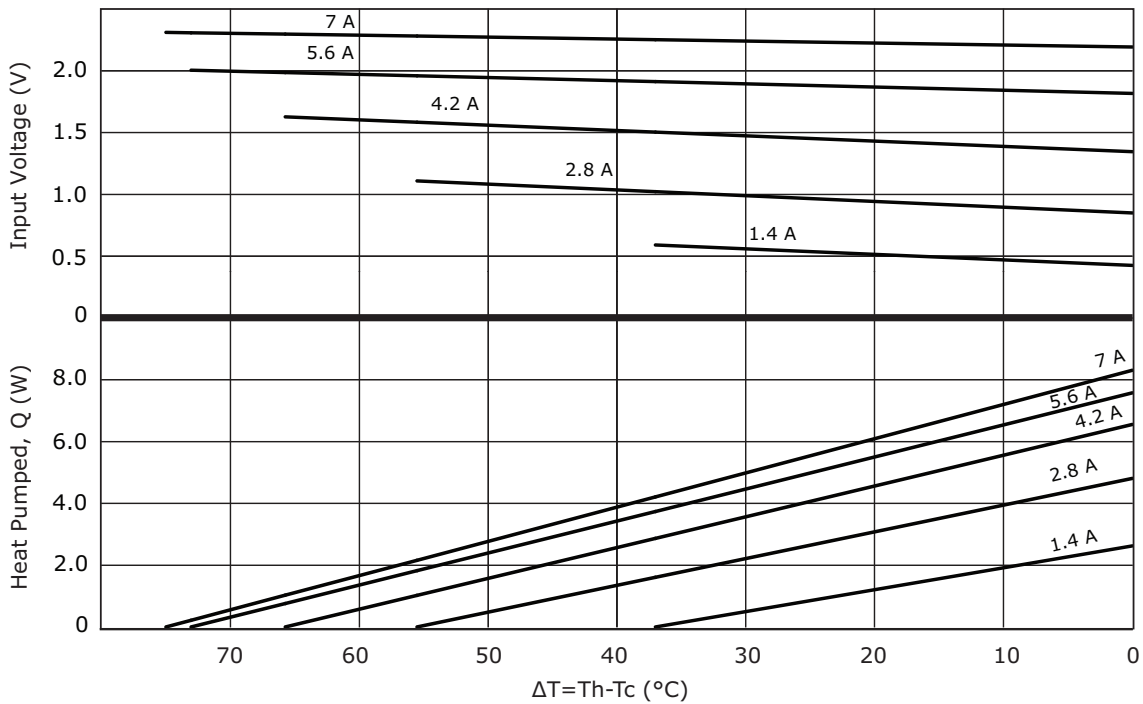
| MODEL NO. | LENGTH (mm) | WIDTH (mm) | THICKNESS (mm) |
|----------------------|-------------|------------|----------------|
| CP70137 | 15 ± 0.3 | 15 ± 0.3 | 3.7 ± 0.1 |
| CP70237 | 20 ± 0.3 | 20 ± 0.3 | 3.7 ± 0.1 |
| CP70301537 | 30 ± 0.3 | 15 ± 0.3 | 3.7 ± 0.1 |
| CP70337 ¹ | 30 ± 0.3 | 30 ± 0.3 | 3.7 ± 0.1 |
| CP70437 ¹ | 40 ± 0.3 | 40 ± 0.3 | 3.7 ± 0.1 |

Notes: 1. Wire lead strip length on models CP70337 & CP70437 is 10 ± 3.0 mm.

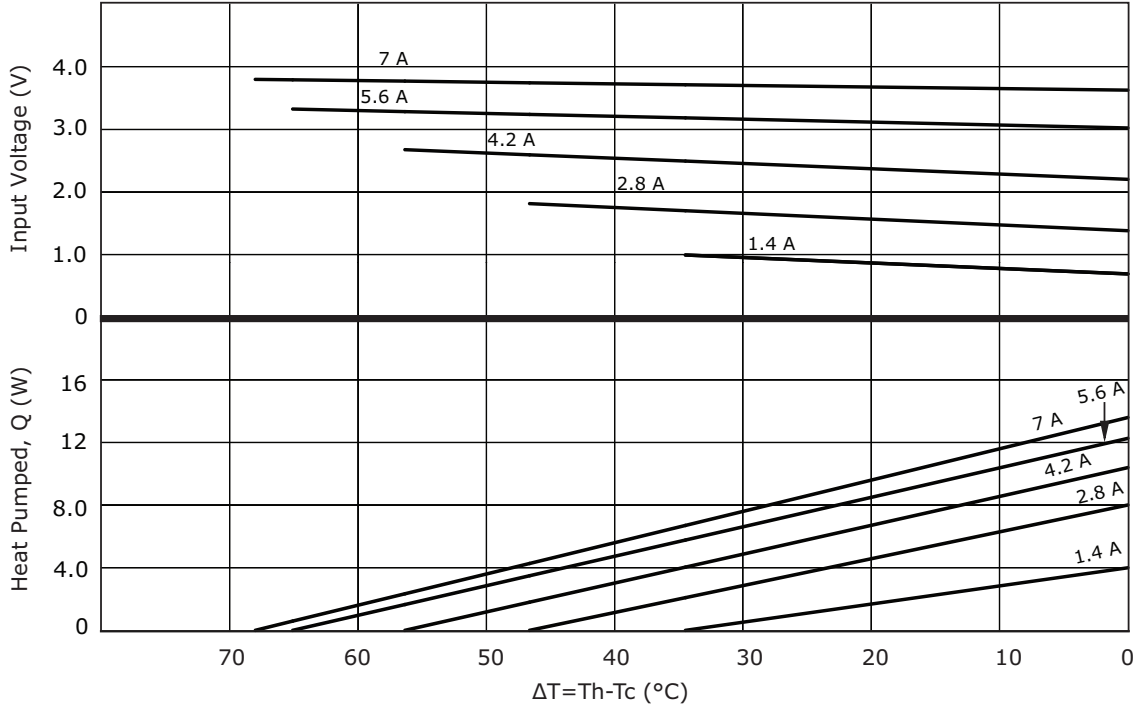
CP70137 PERFORMANCE (Th=27°C)



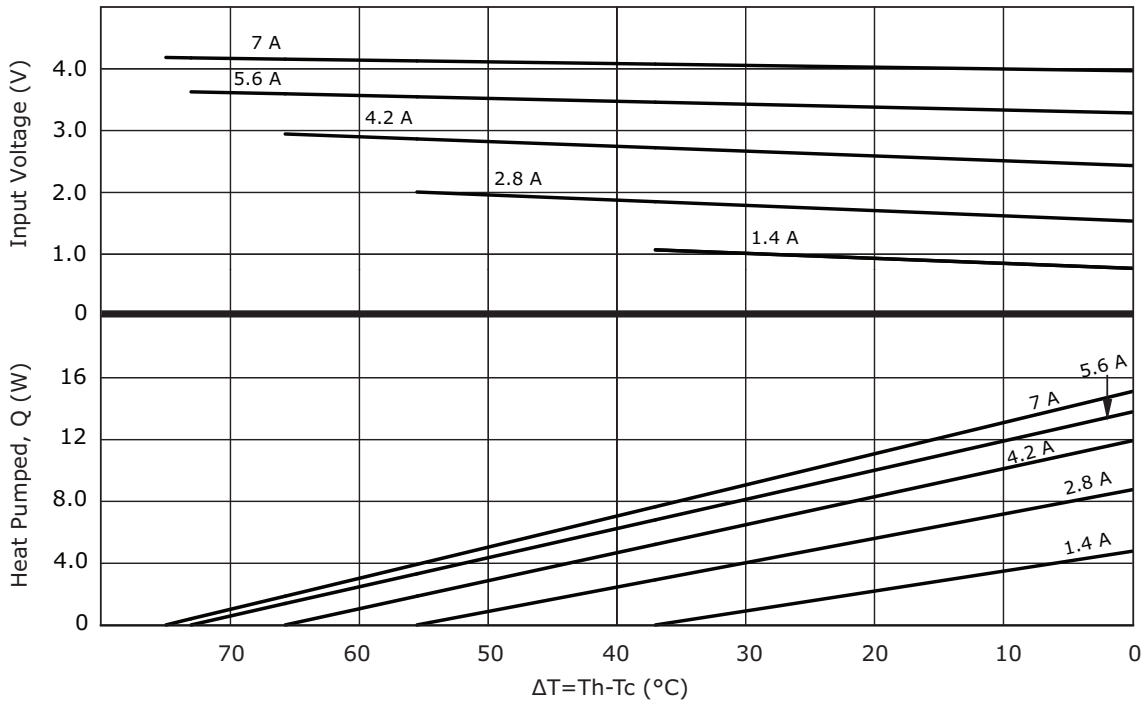
CP70137 PERFORMANCE (Th=50°C)



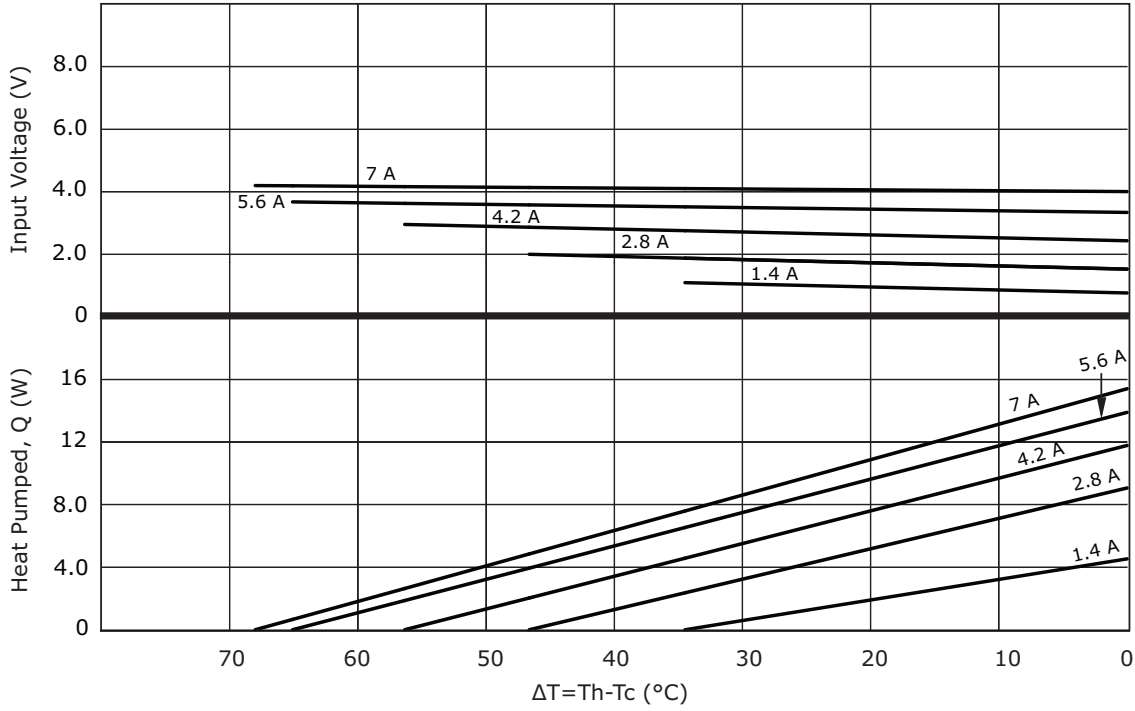
CP70237 PERFORMANCE (Th=27°C)



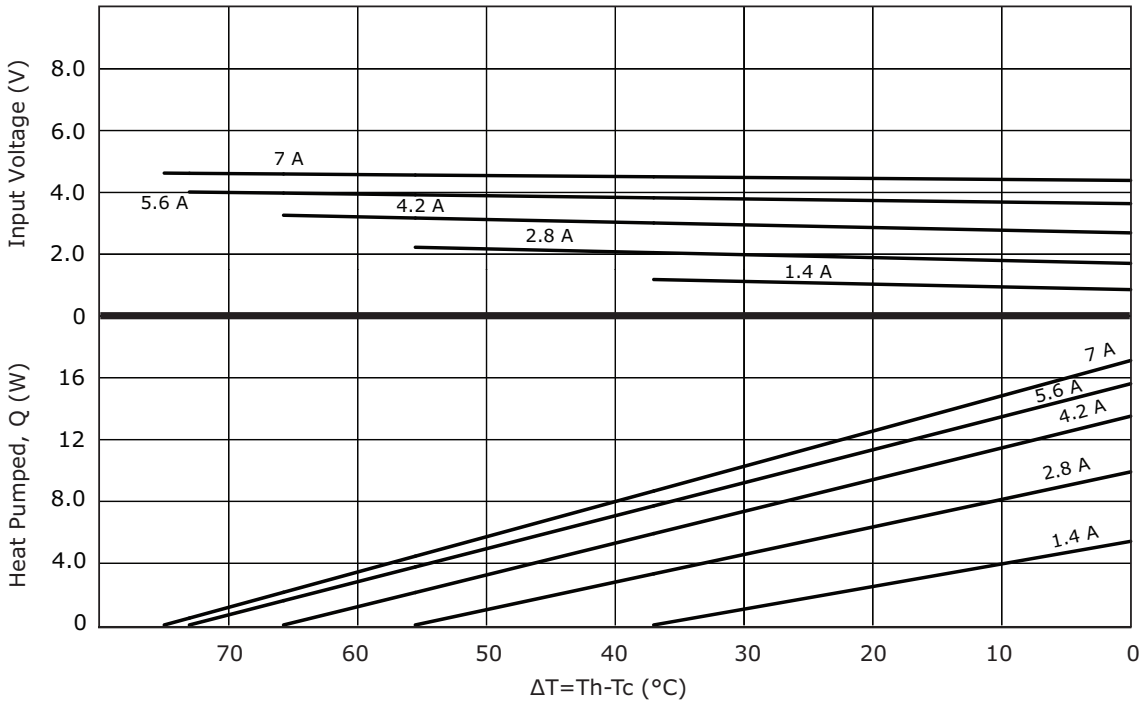
CP70237 PERFORMANCE (Th=50°C)



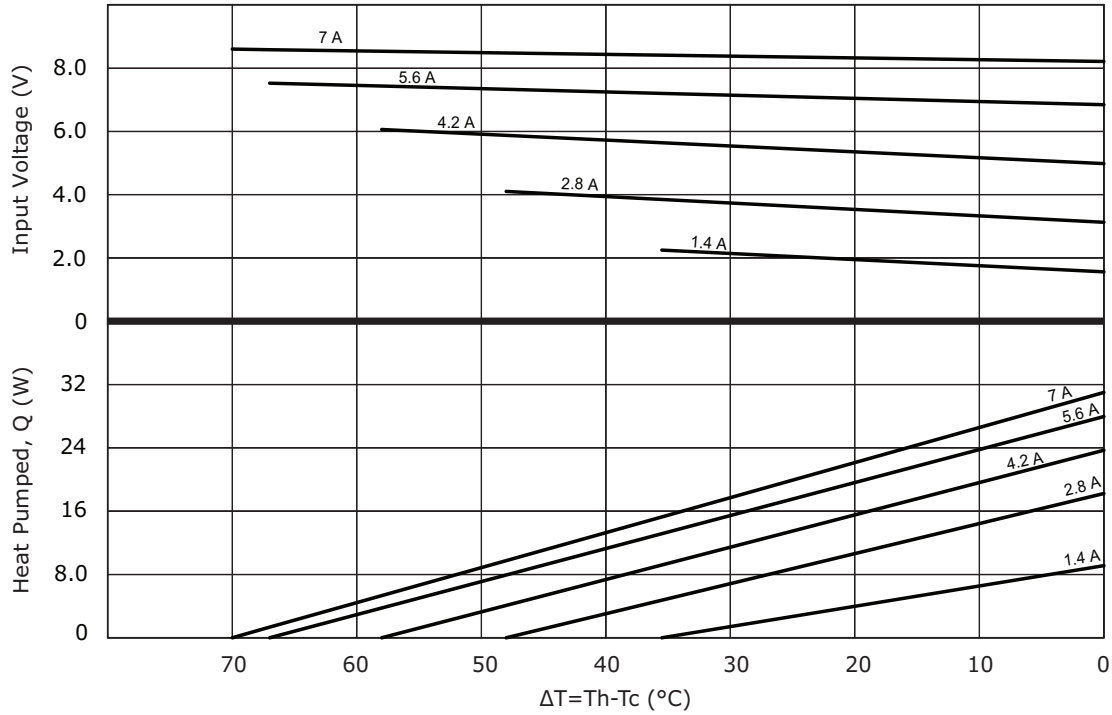
CP70301537 PERFORMANCE (Th=27°C)



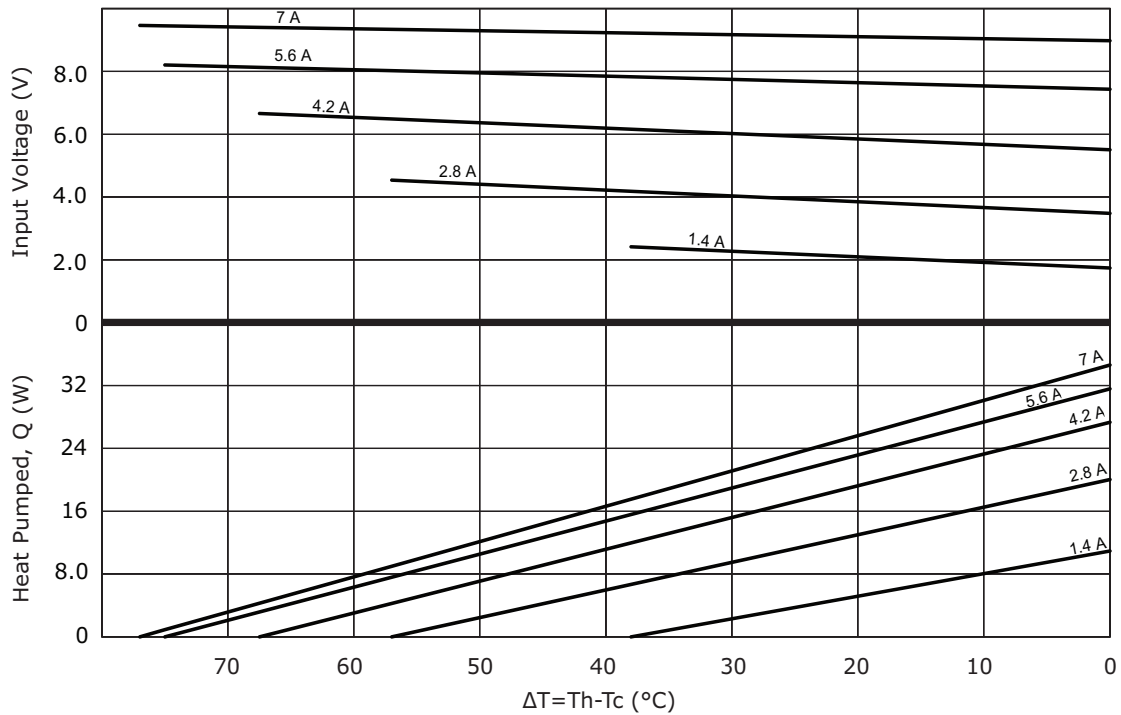
CP70301537 PERFORMANCE (Th=50°C)



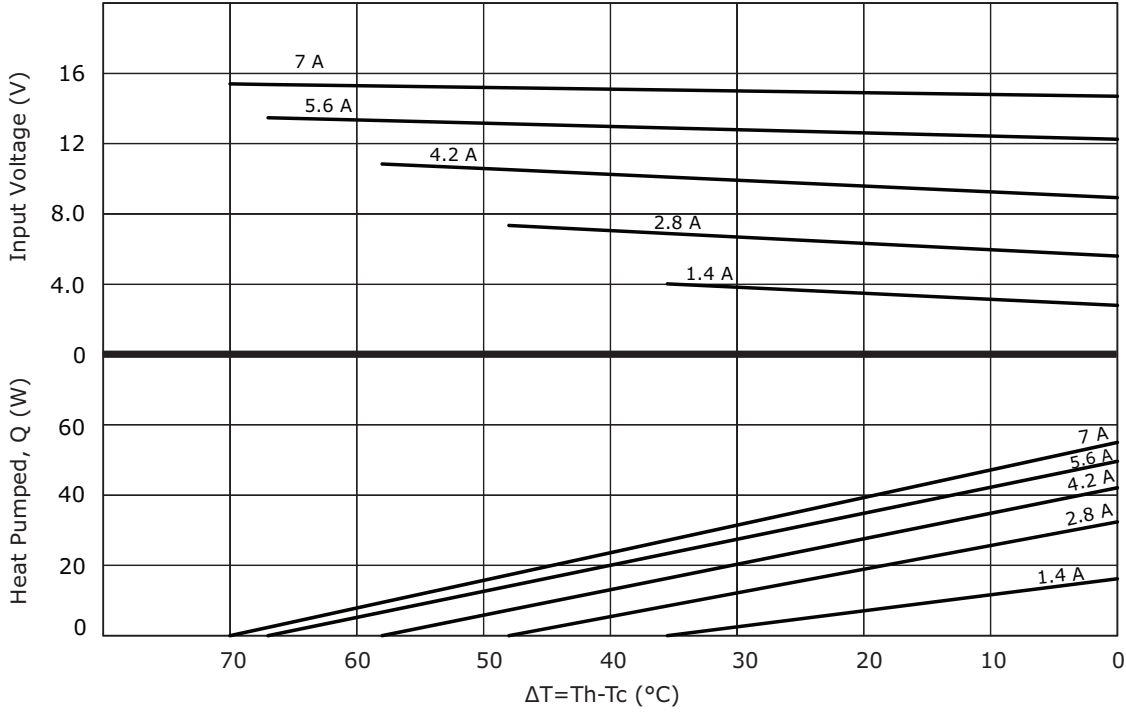
CP70337 PERFORMANCE (Th=27°C)



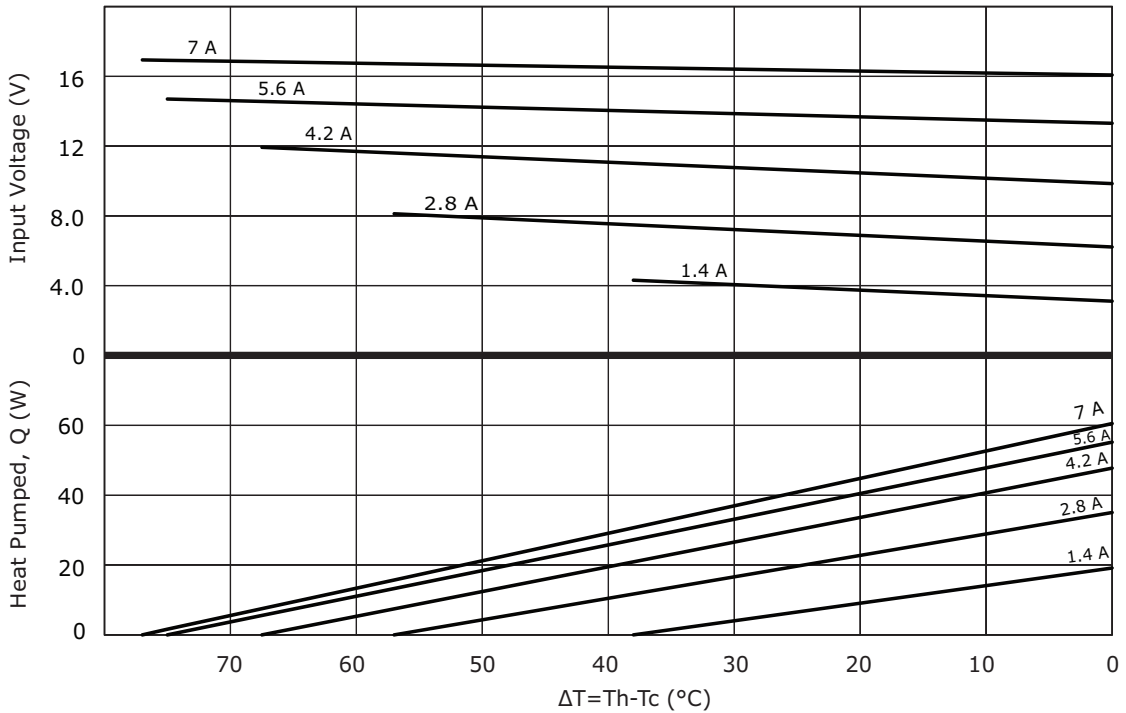
CP70337 PERFORMANCE (Th=50°C)



CP70437 PERFORMANCE (Th=27°C)



CP70437 PERFORMANCE (Th=50°C)



REVISION HISTORY

| rev. | description | date |
|------|--|------------|
| 1.0 | initial release | 09/08/2016 |
| 1.01 | changed models CP70337 & CP70437 to arcTEC™ structure | 12/01/2017 |
| 1.02 | changed thickness of CP70137, CP70237, CP70301537 models | 09/19/2018 |
| 1.03 | brand update | 10/30/2019 |
| 1.04 | logo, datasheet style update | 08/05/2022 |
| 1.05 | CUI Devices rebranded to Same Sky | 09/12/2024 |

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



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

Same Sky reserves the right to make changes to the product at any time without notice. Information provided by Same Sky is believed to be accurate and reliable. However, no responsibility is assumed by Same Sky for its use, nor for any infringements of patents or other rights of third parties which may result from its use.

Same Sky products are not authorized or warranted for use as critical components in equipment that requires an extremely high level of reliability. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

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