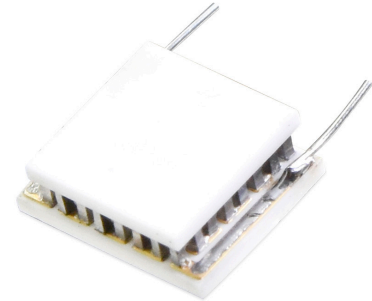




SERIES: CP07-M | **DESCRIPTION:** PELTIER MODULE

FEATURES

- micro size (less than 10 x 10 mm)
- wide ΔT_{max}
- Q_{max} up to 1.9 W
- Au plating available, suitable for soldering
- precise temperature control
- solid state construction



MODEL

| | input voltage ¹ | input current ² | internal resistance ³ | output Q_{max} 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] | $T_h=27^\circ\text{C}$ [$^\circ\text{C}$] | $T_h=50^\circ\text{C}$ [$^\circ\text{C}$] |
| CP0734-238 | 0.5 | 0.7 | 0.52 | 0.2 | 0.2 | 70 | 77 |
| CP0734-277P ⁶ | 0.5 | 0.7 | 0.52 | 0.2 | 0.2 | 70 | 77 |
| CP073450-238 | 1.0 | 0.7 | 1.04 | 0.4 | 0.5 | 70 | 77 |
| CP074933-238 | 1.3 | 0.7 | 1.43 | 0.6 | 0.7 | 70 | 77 |
| CP074933-277P ⁶ | 1.3 | 0.7 | 1.43 | 0.6 | 0.7 | 70 | 77 |
| CP074965-239 | 2.1 | 0.7 | 2.35 | 0.9 | 1.0 | 70 | 77 |
| CP074965-238P ⁶ | 2.1 | 0.7 | 2.35 | 0.9 | 1.0 | 70 | 77 |
| CP076581-238 | 3.9 | 0.7 | 4.17 | 1.7 | 1.9 | 70 | 77 |
| CP076581-238P ⁶ | 3.9 | 0.7 | 4.17 | 1.7 | 1.9 | 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. Gold plating on both sides.

SOLDERABILITY⁷

| parameter | conditions/description | min | typ | max | units |
|---------------------|----------------------------|-----|-----|-----|------------------|
| soldering to plates | soldering iron temperature | | | 150 | $^\circ\text{C}$ |

- Note:
7. Only for gold plated models. The solder that holds the peltier together melts at 235°C . Caution must taken to not leave the soldering iron in contact with the surface too long, or damage to the peltier could occur.

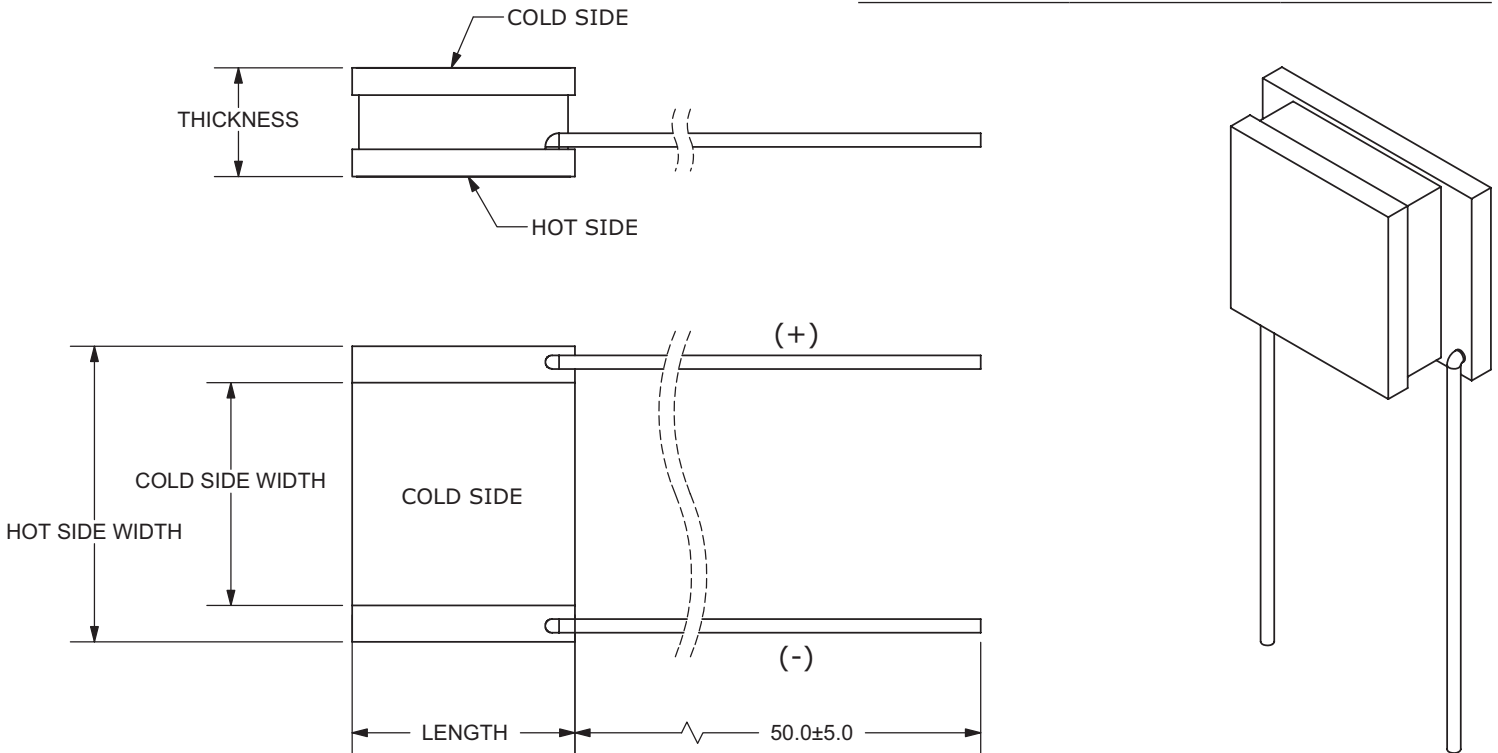
SPECIFICATIONS

| parameter | conditions/description | min | typ | max | units |
|----------------------------|---|-----|-----|-----|-------|
| solder melting temperature | connection between thermoelectric pairs | 235 | | | °C |
| assembly compression | | | | 0.8 | MPa |
| RoHS | yes | | | | |

MECHANICAL DRAWING

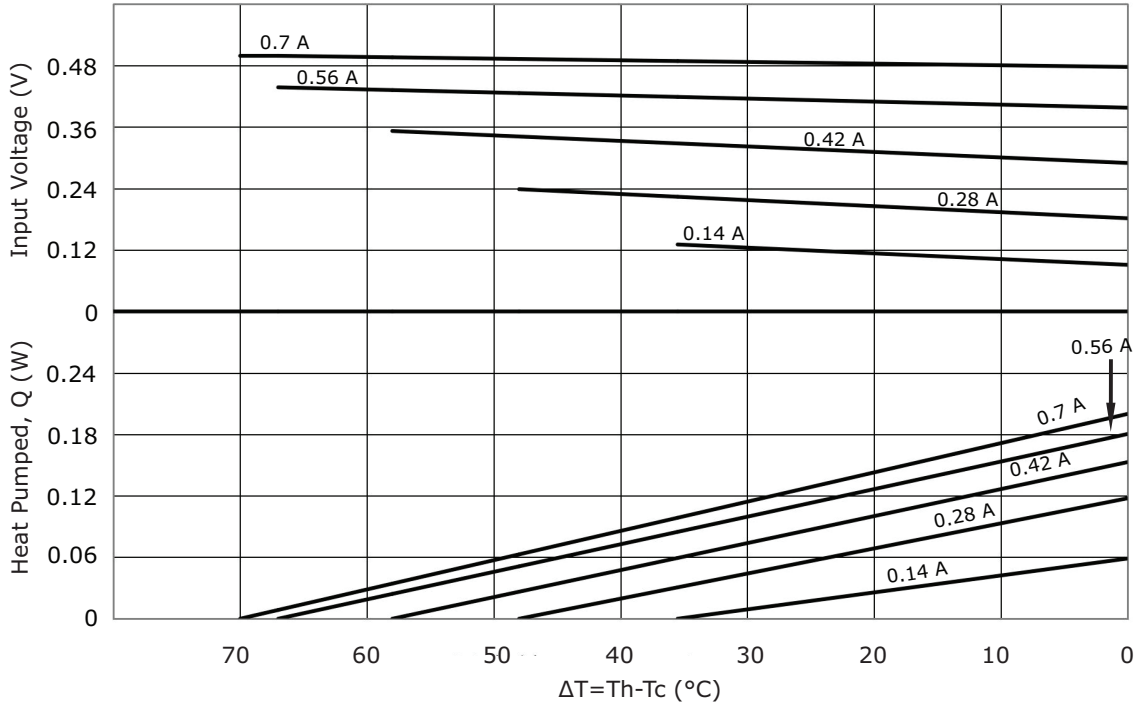
units: mm

| | MATERIAL | PLATING |
|-----------------|------------------------------------|---------|
| ceramic plate | 96% AL ₂ O ₃ | |
| wire leads | Ø0.25-0.3 mm annealed copper | tin |
| sealer | no sealing | |
| ceramic surface | Au plating on select models | |

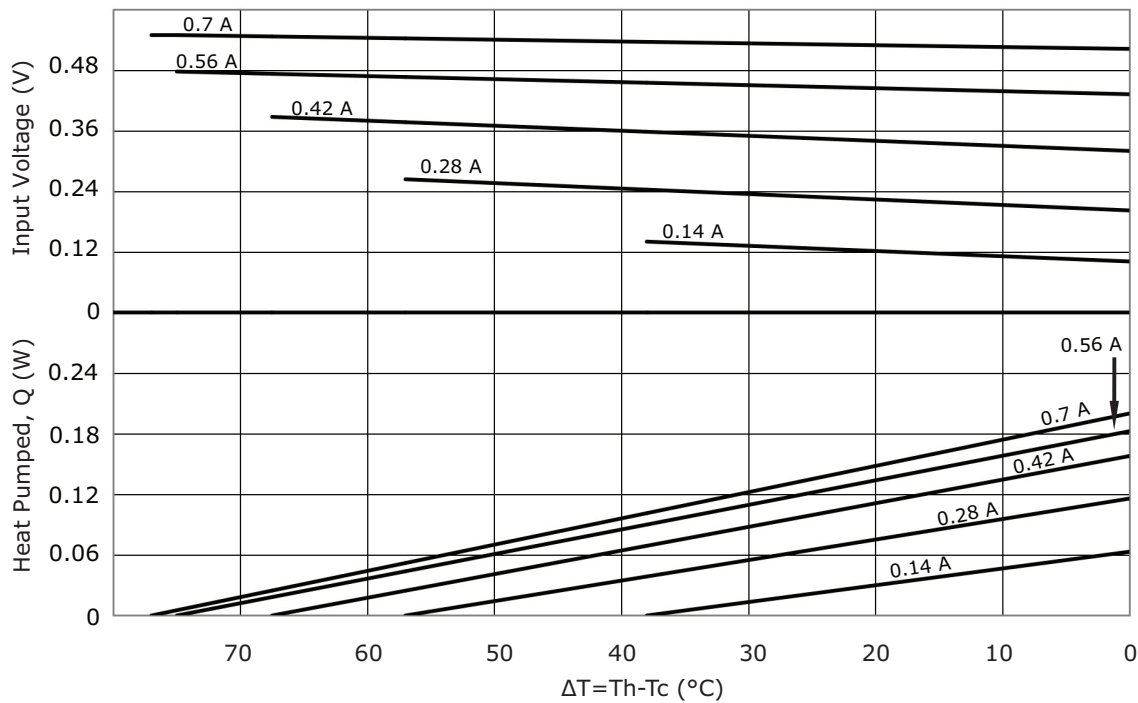


| MODEL NO. | LENGTH [mm] | HOT SIDE WIDTH [mm] | COLD SIDE WIDTH [mm] | THICKNESS [mm] | GOLD PLATING HOT/ COLD SIDES |
|---------------|-------------|---------------------|----------------------|----------------|------------------------------|
| CP0734-238 | 3.4 ± 0.3 | 3.4 ± 0.3 | 1.8 ± 0.3 | 2.38 ± 0.15 | NO |
| CP0734-277P | 3.4 ± 0.3 | 3.4 ± 0.3 | 1.8 ± 0.3 | 2.77 ± 0.15 | YES |
| CP073450-238 | 3.4 ± 0.3 | 5.0 ± 0.3 | 3.4 ± 0.3 | 2.38 ± 0.15 | NO |
| CP074933-238 | 4.9 ± 0.3 | 3.3 ± 0.3 | 3.3 ± 0.3 | 2.38 ± 0.15 | NO |
| CP074933-277P | 4.9 ± 0.3 | 3.3 ± 0.3 | 3.3 ± 0.3 | 2.77 ± 0.15 | YES |
| CP074965-239 | 4.9 ± 0.3 | 6.5 ± 0.3 | 4.9 ± 0.3 | 2.38 ± 0.15 | NO |
| CP074965-238P | 4.9 ± 0.3 | 6.5 ± 0.3 | 4.9 ± 0.3 | 2.77 ± 0.15 | YES |
| CP076581-238 | 6.5 ± 0.3 | 8.1 ± 0.3 | 6.5 ± 0.3 | 2.38 ± 0.15 | NO |
| CP076581-238P | 6.5 ± 0.3 | 8.1 ± 0.3 | 6.5 ± 0.3 | 2.77 ± 0.15 | YES |

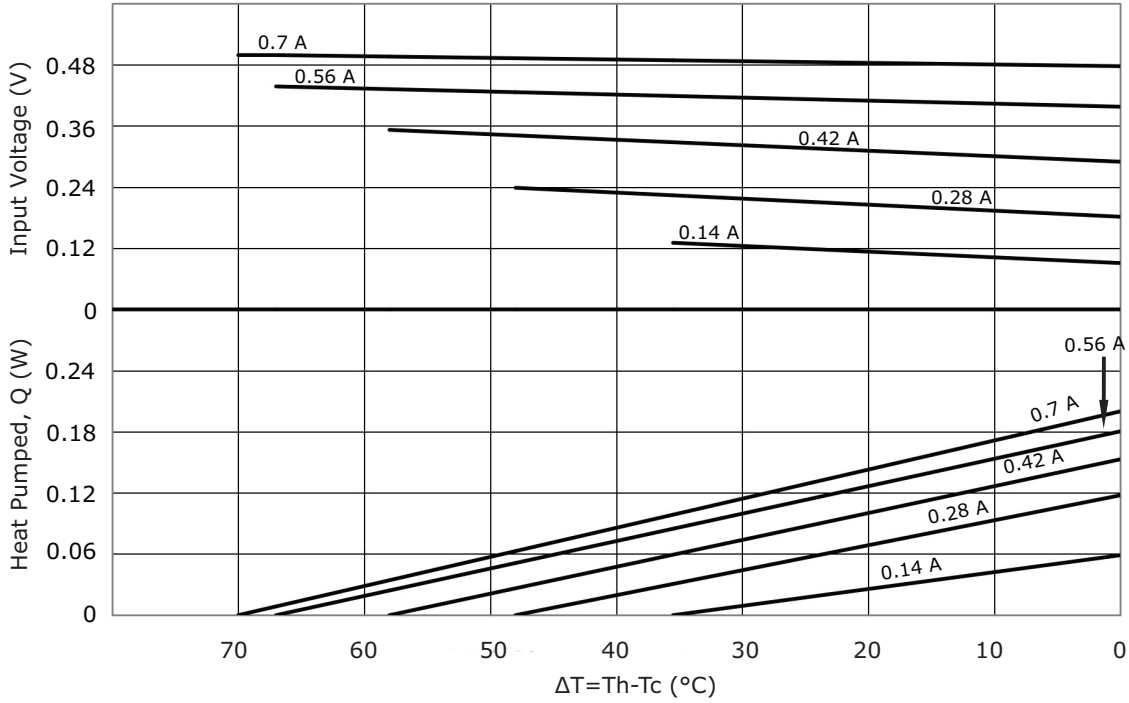
CP0734-238 PERFORMANCE (Th=27°C)



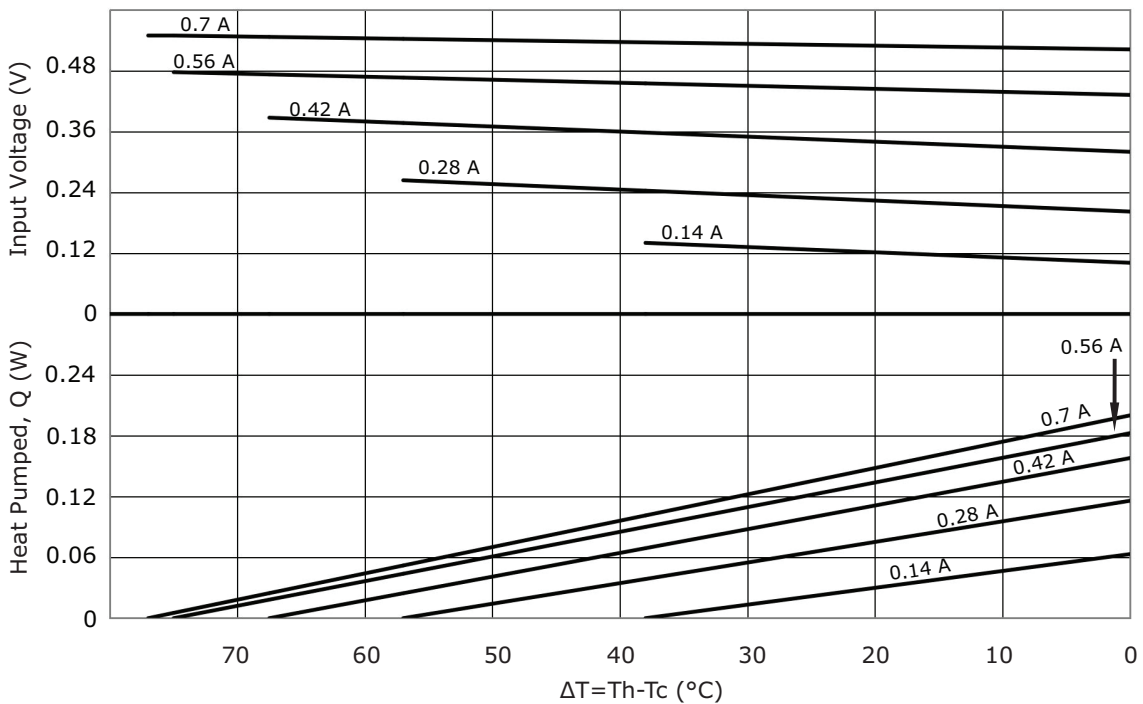
CP0734-238 PERFORMANCE (Th=50°C)



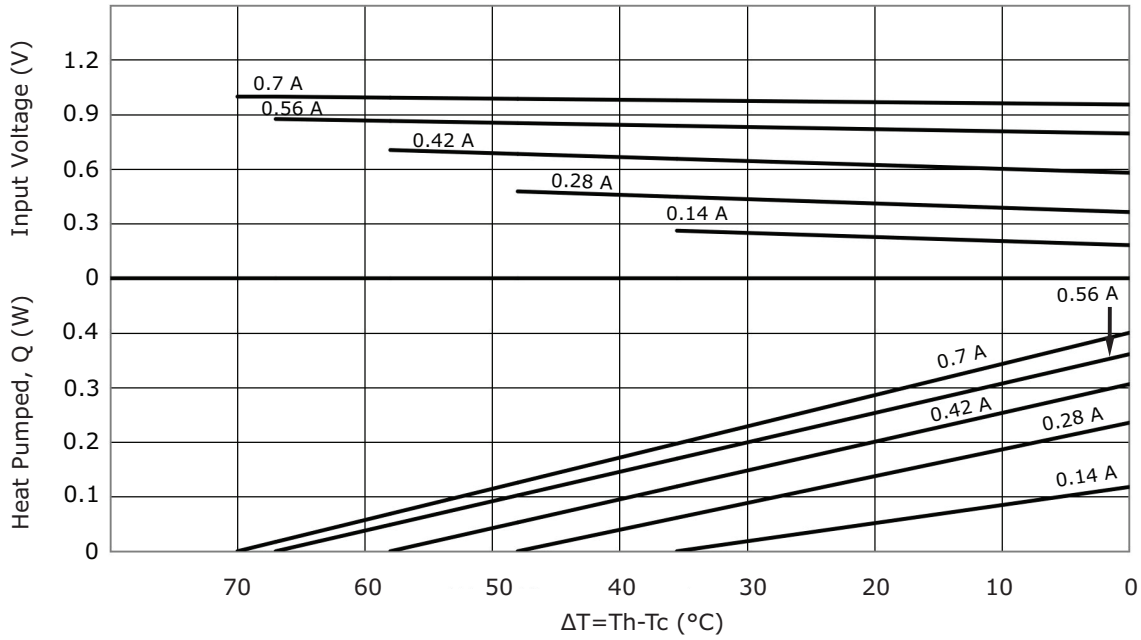
CP0734-277P PERFORMANCE (Th=27°C)



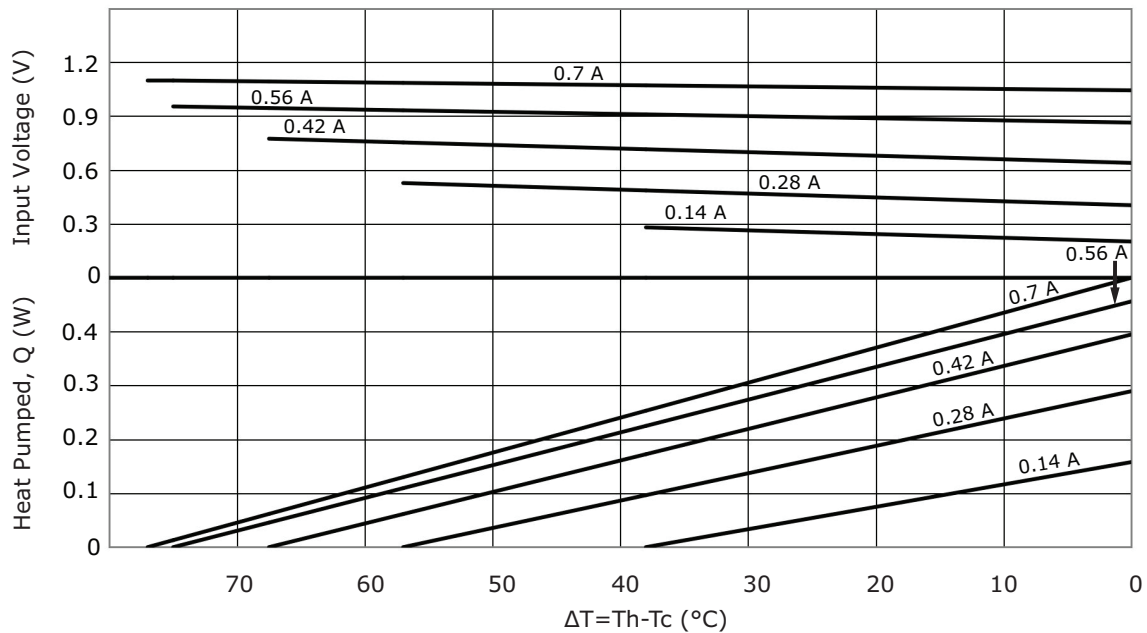
CP0734-277P PERFORMANCE (Th=50°C)



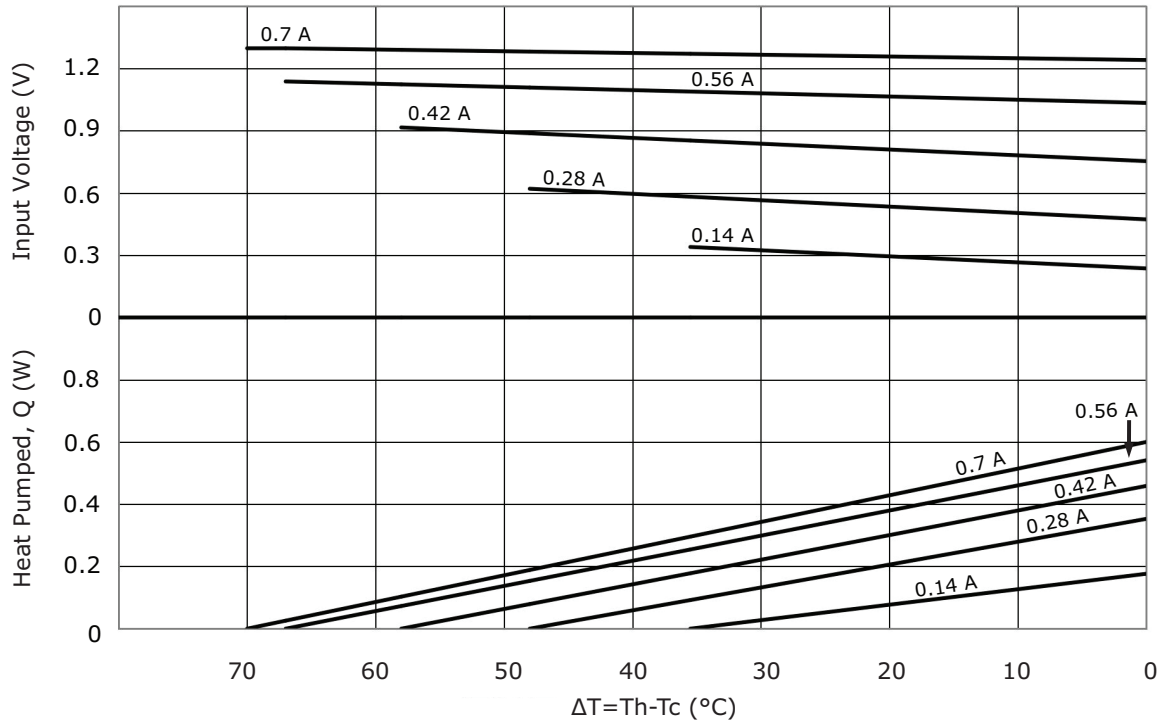
CP073450-238 PERFORMANCE (Th=27°C)



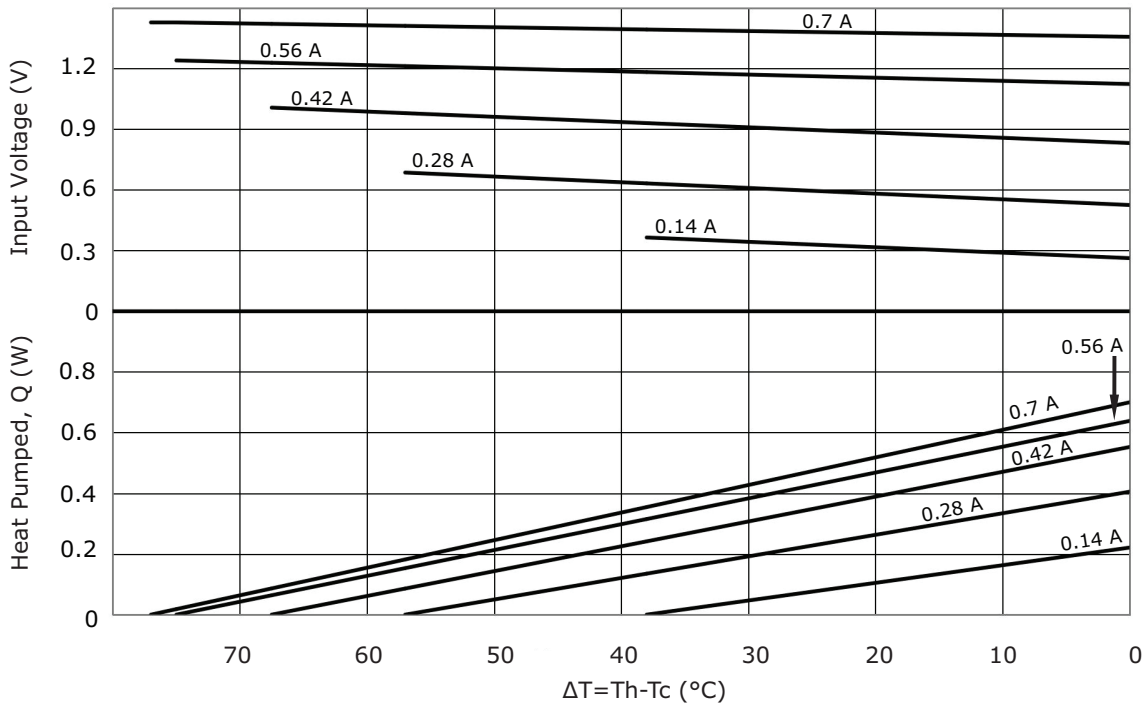
CP073450-238 PERFORMANCE (Th=50°C)



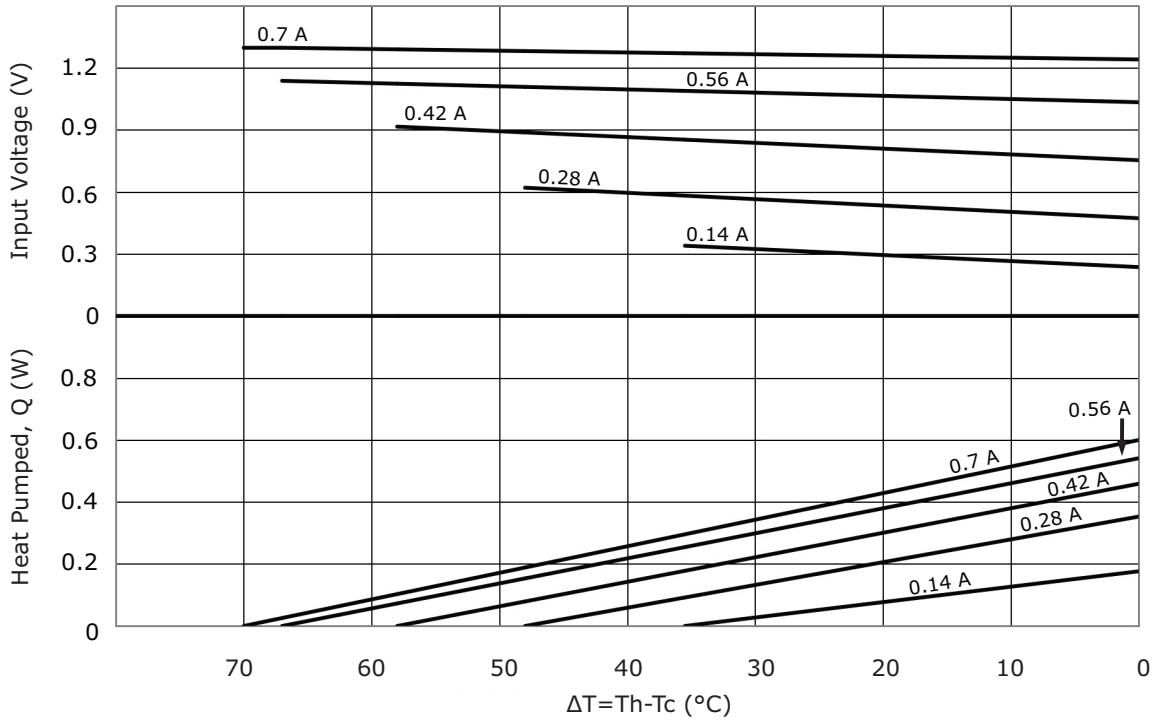
CP074933-238 PERFORMANCE (Th=27°C)



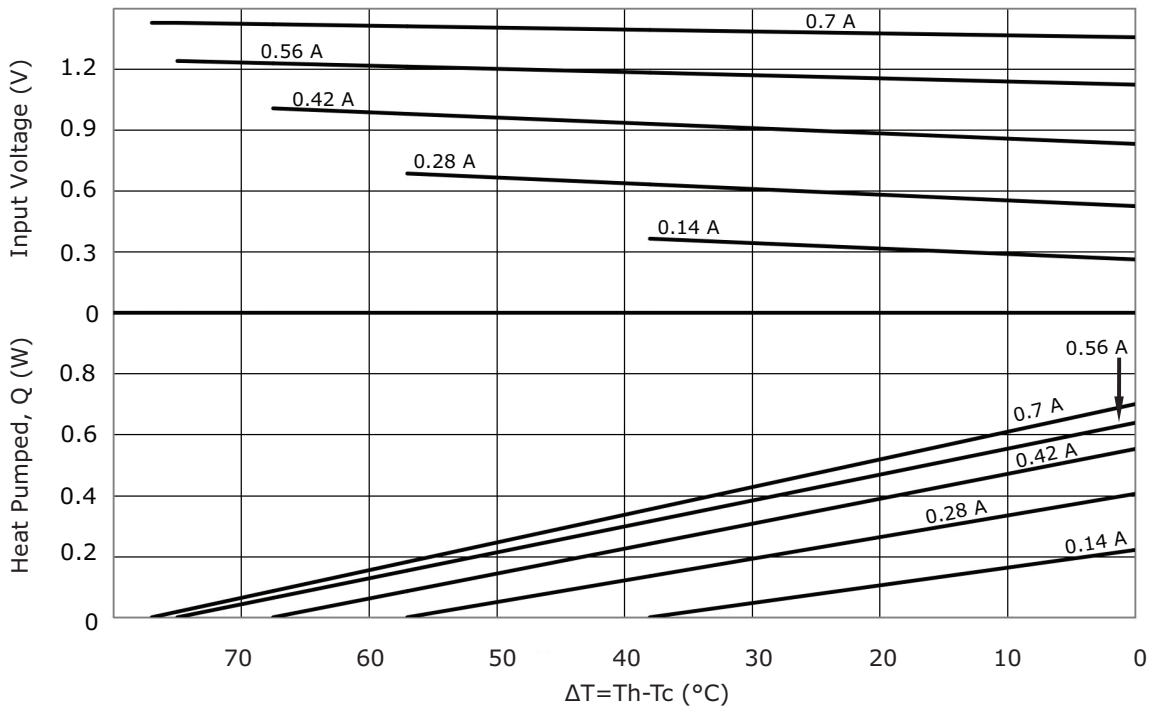
CP074933-238 PERFORMANCE (Th=50°C)



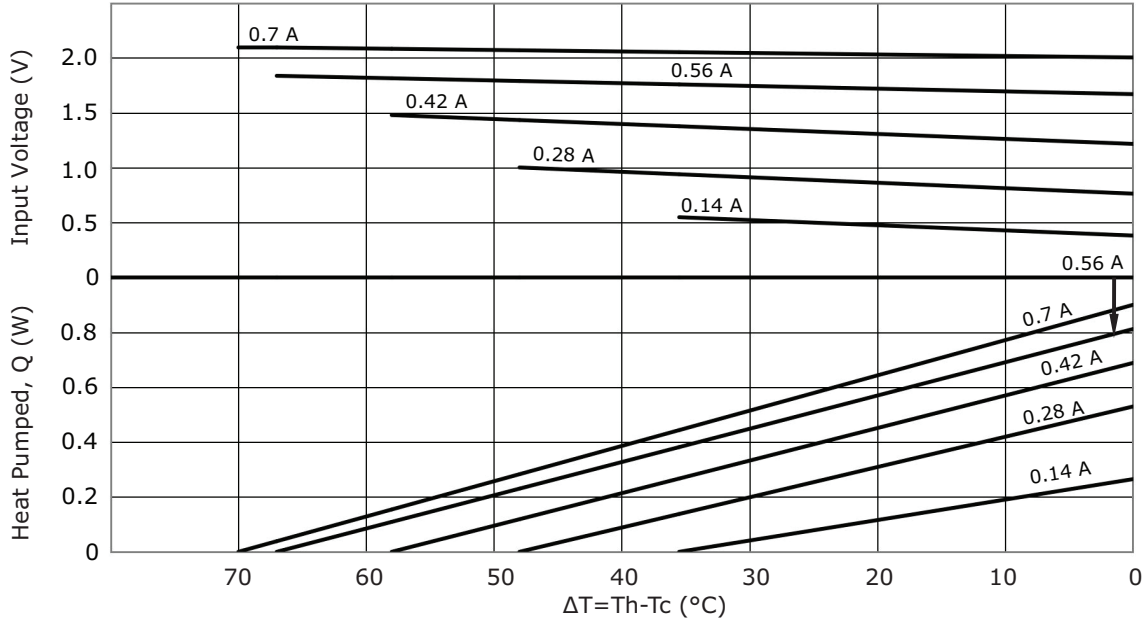
CP074933-277P PERFORMANCE (Th=27°C)



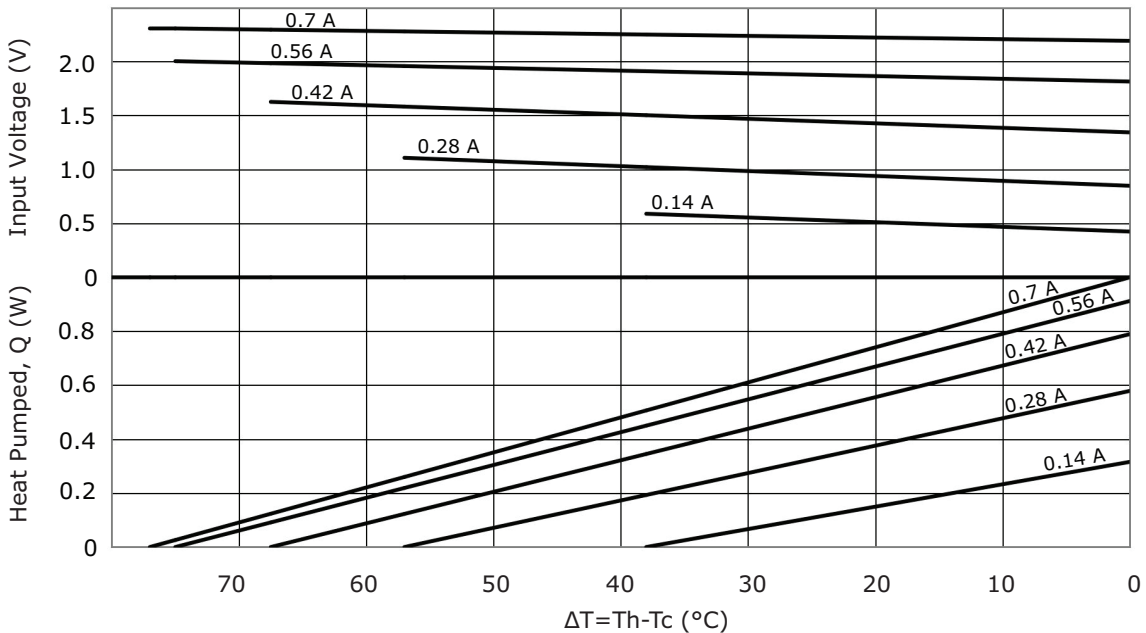
CP074933-277P PERFORMANCE (Th=50°C)



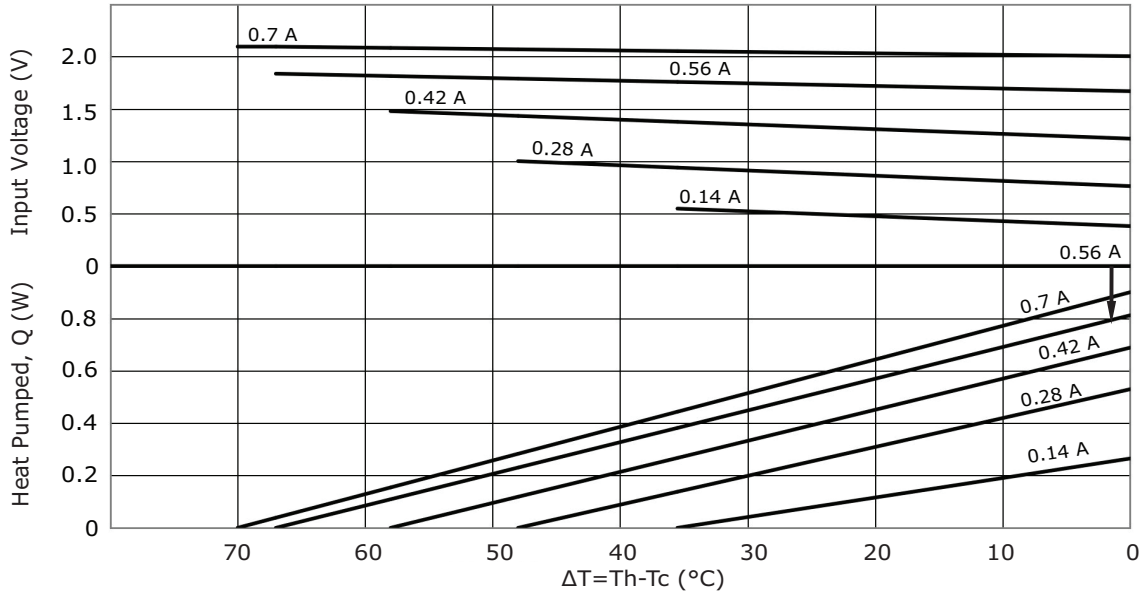
CP074965-239 PERFORMANCE (Th=27°C)



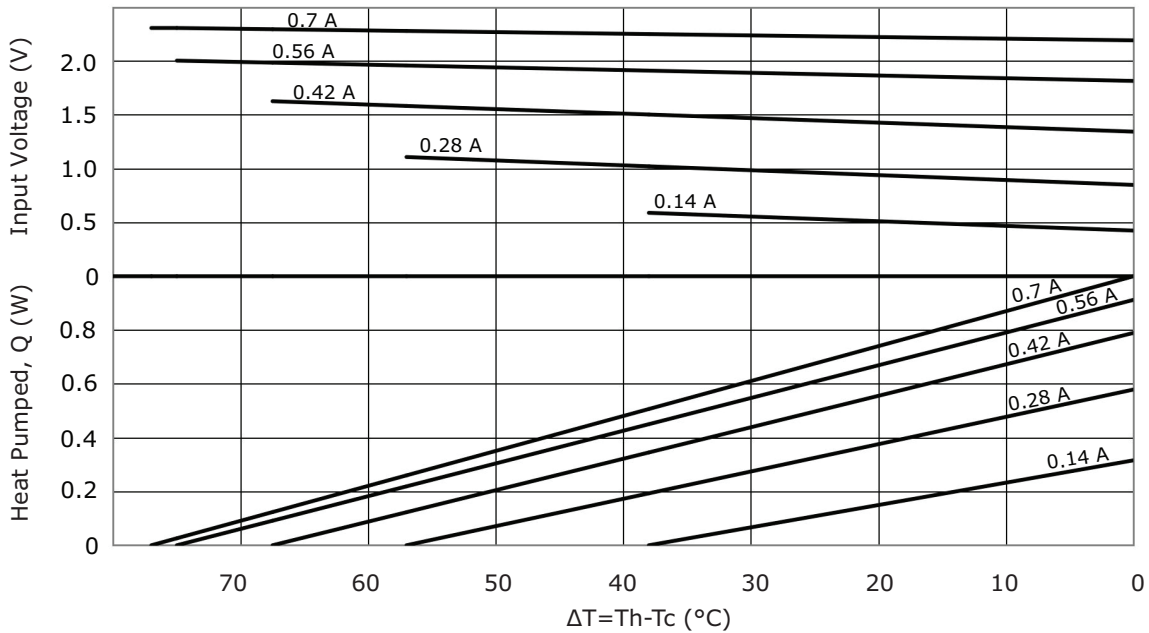
CP074965-239 PERFORMANCE (Th=50°C)



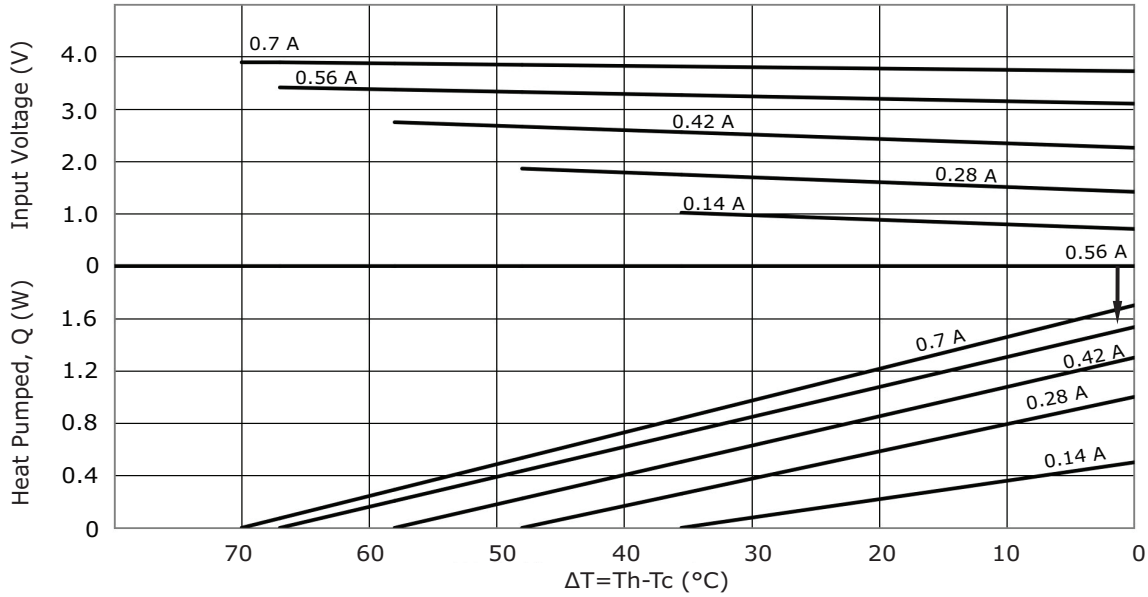
CP074965-238P PERFORMANCE (Th=27°C)



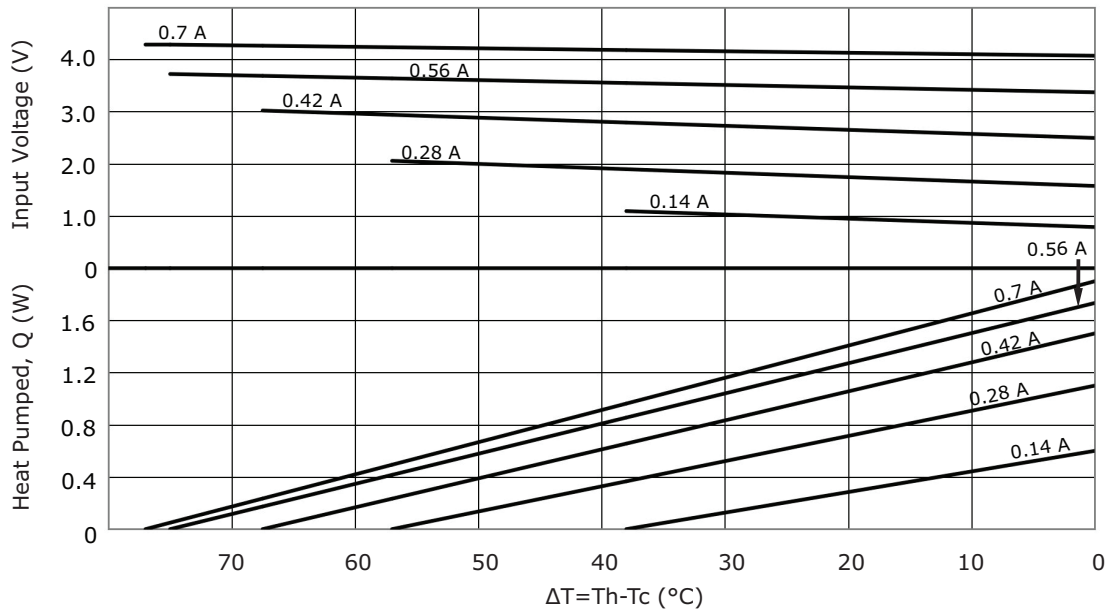
CP074965-238P PERFORMANCE (Th=50°C)



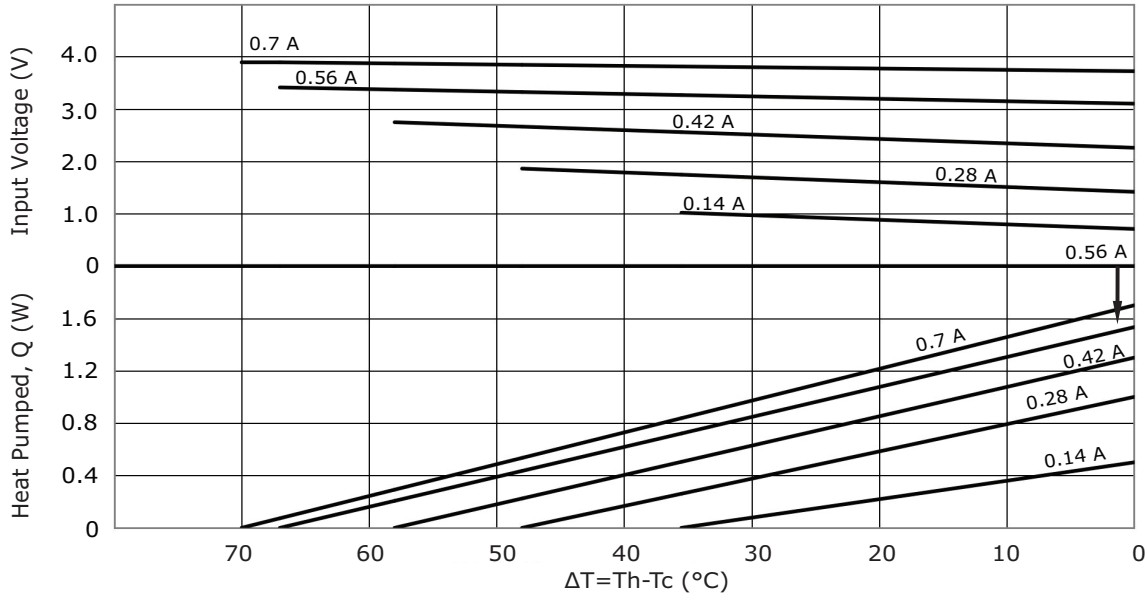
CP076581-238 PERFORMANCE (Th=27°C)



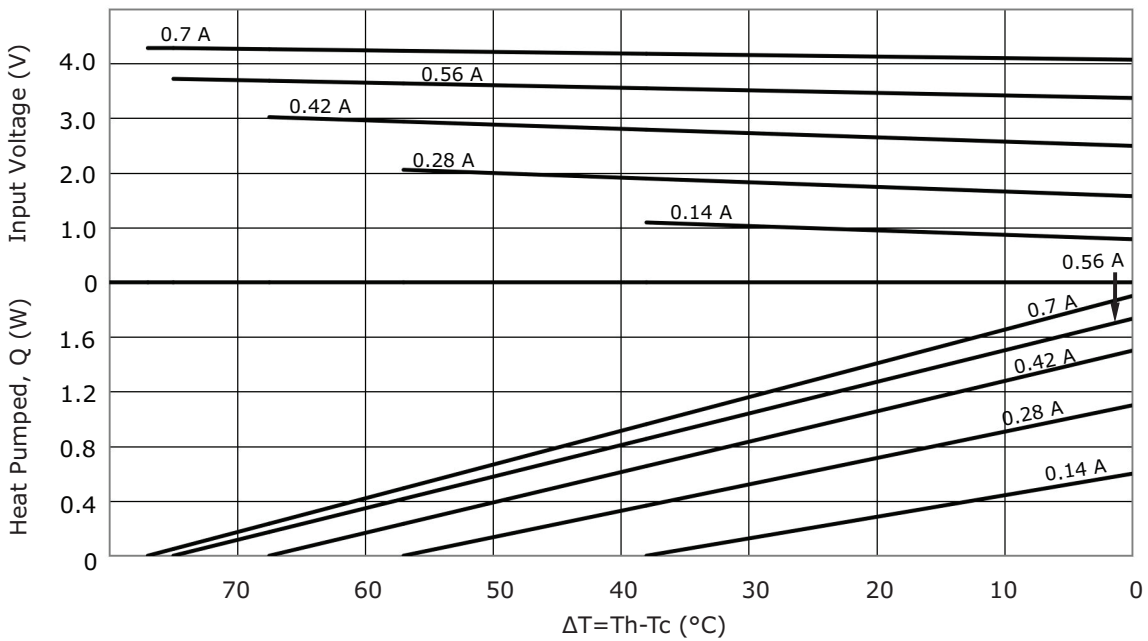
CP076581-238 PERFORMANCE (Th=50°C)



CP076581-238P PERFORMANCE (Th=27°C)



CP076581-238P PERFORMANCE (Th=50°C)



REVISION HISTORY

| rev. | description | date |
|------|-----------------------------------|------------|
| 1.0 | initial release | 07/08/2020 |
| 1.01 | logo, datasheet style update | 08/05/2022 |
| 1.02 | 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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