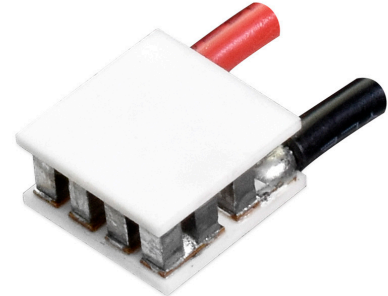


**SERIES:** CP34-M | **DESCRIPTION:** PELTIER MODULE**FEATURES**

- micro size (less than 10 x 10 mm)
- wide  $\Delta T$  max
- $Q_{max}$  of 1.9 W
- precise temperature control
- solid state construction

**MODEL**

| MODEL     | input voltage <sup>1</sup><br>max<br>(Vdc) | input current <sup>2</sup><br>max<br>(A) | internal resistance <sup>3</sup><br>typ<br>( $\Omega \pm 0.05$ ) | output $Q_{max}$ <sup>4</sup>   |                                 | output $\Delta T_{max}$ <sup>5</sup>             |  |
|-----------|--|--|--|---------------------------------|---------------------------------|--|--|
|           |  |  |  | $T_h = 27^\circ\text{C}$<br>(W) | $T_h = 50^\circ\text{C}$<br>(W) | $T_h = 27^\circ\text{C}$<br>( $^\circ\text{C}$ ) | $T_h = 50^\circ\text{C}$<br>( $^\circ\text{C}$ ) |
| CP3495-46 | 0.8  | 3.4                                      | 0.19   | 1.7                             | 1.9                             | 70   | 77   |

- Notes:
1. Maximum voltage at  $\Delta T$  max and  $T_h = 27^\circ\text{C}$
  2. Maximum current to achieve  $\Delta T$  max
  3. Measured by AC 4-terminal method at  $25^\circ\text{C}$
  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  $Q = 0\text{W}$  ( $\Delta T$  max measured in a vacuum at 1.3 Pa)

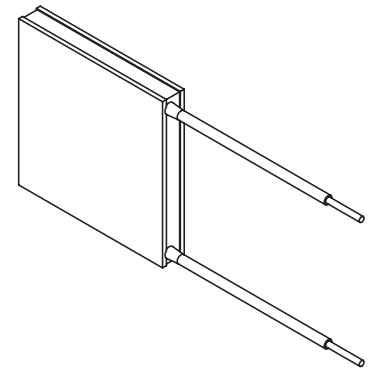
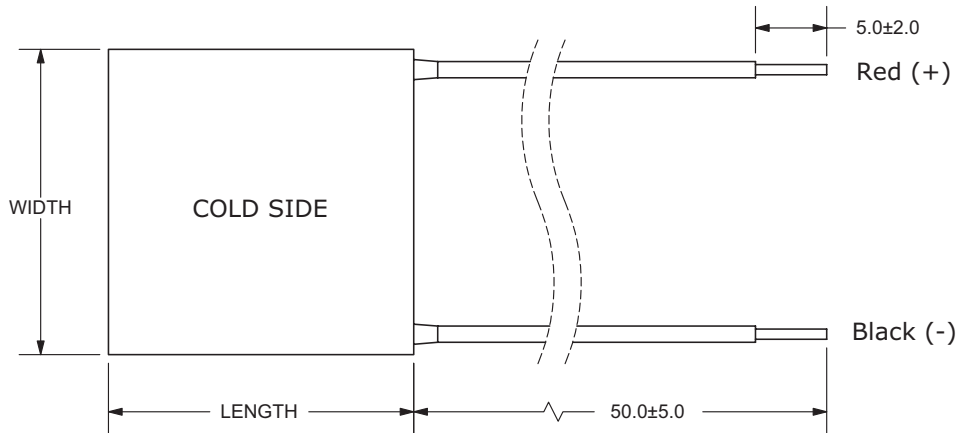
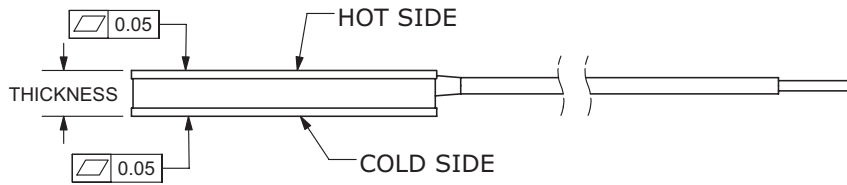
## SPECIFICATIONS

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

## MECHANICAL DRAWING

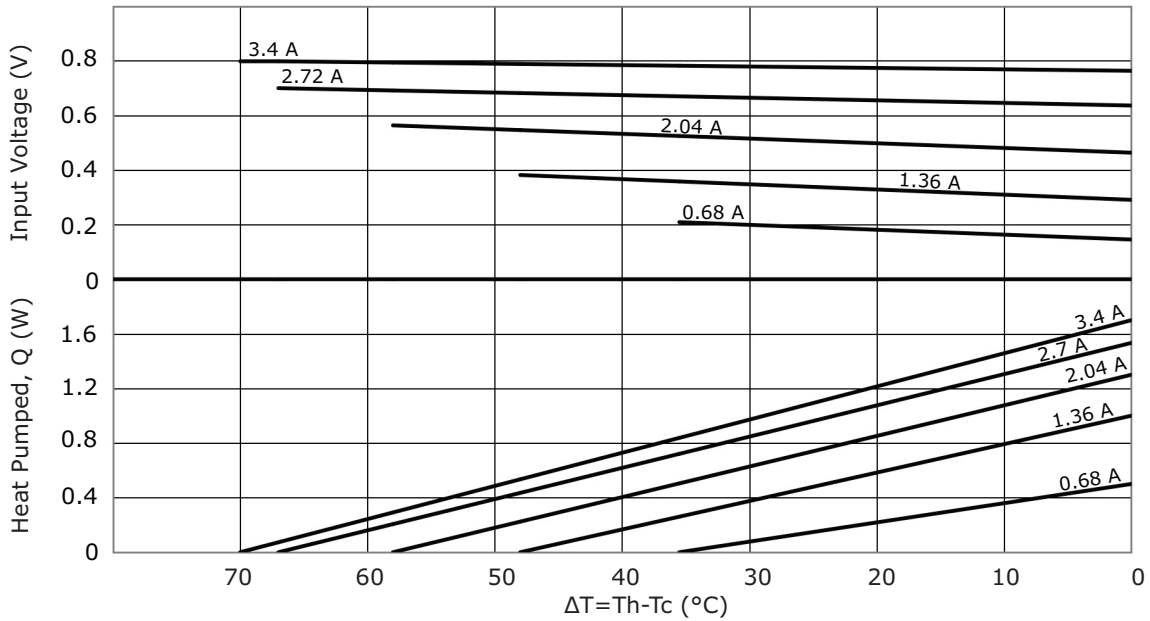
units: mm

|               | MATERIAL                           | PLATING |
|---------------|------------------------------------|---------|
| ceramic plate | 96% AL <sub>2</sub> O <sub>3</sub> |         |
| wire leads    | 18 AWG                             | tin     |
| sealer        | no sealing                         |         |

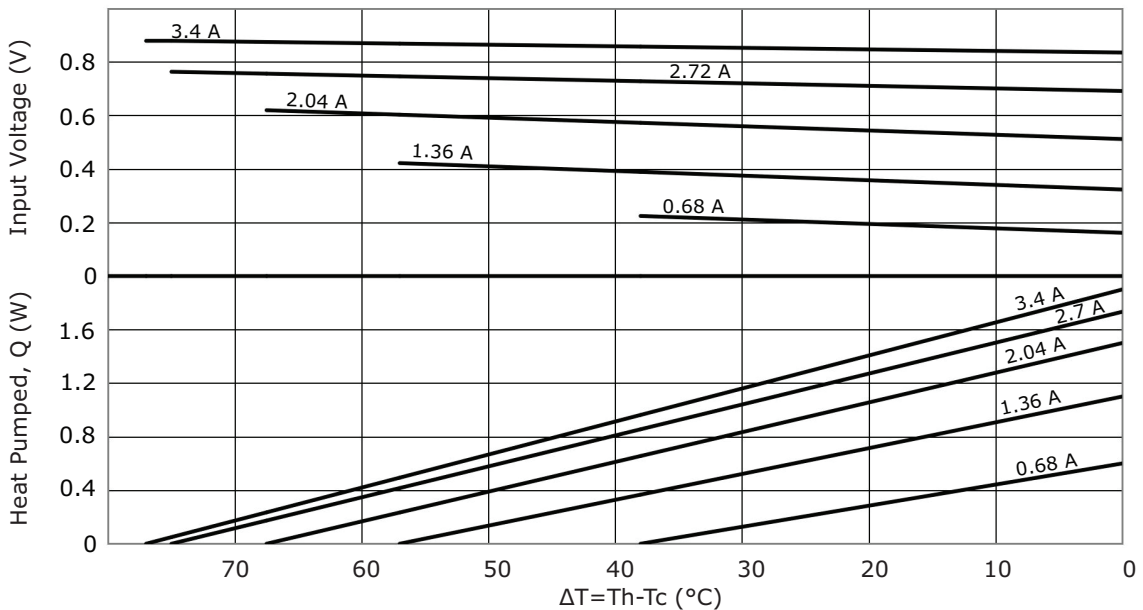


| MODEL NO. | LENGTH (mm) | WIDTH (mm) | THICKNESS (mm) |
|-----------|-------------|------------|----------------|
| CP3495-46 | 9.5 ± 0.3   | 9.5 ± 0.3  | 4.6 ± 0.15     |

### CP3495-46 PERFORMANCE (Th=27°C)



### CP3495-46 PERFORMANCE (Th=50°C)



## REVISION HISTORY

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| rev. | description     | date       |
|------|-----------------|------------|
| 1.0  | initial release | 07/08/2020 |

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

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