**SERIES: CP40 | DESCRIPTION: PELTIER MODULE**

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

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**MODEL**

<table>
<thead>
<tr>
<th>Model</th>
<th>Input Voltage(^1) max (Vdc)</th>
<th>Input Current(^2) max (A)</th>
<th>Internal Resistance(^3) typ (Ω±10%)</th>
<th>Output Q(^4) max(^5)</th>
<th>∆T(^6) max (^5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CP40136</td>
<td>3.8</td>
<td>4.0</td>
<td>0.80</td>
<td>8.1</td>
<td>66</td>
</tr>
<tr>
<td>CP40236</td>
<td>8.6</td>
<td>4.0</td>
<td>2.0</td>
<td>18.7</td>
<td>66</td>
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<tr>
<td>CP40336</td>
<td>15.4</td>
<td>4.0</td>
<td>3.5</td>
<td>33.4</td>
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<tr>
<td>CP40147</td>
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<td>4.0</td>
<td>0.42</td>
<td>4.2</td>
<td>68</td>
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<tr>
<td>CP40247</td>
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<td>4.0</td>
<td>0.77</td>
<td>7.5</td>
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<td>CP402533(^6)</td>
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<td>4.0</td>
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<td>35.2</td>
<td>68</td>
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<tr>
<td>CP40301547</td>
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<td>4.0</td>
<td>0.87</td>
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<td>68</td>
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<tr>
<td>CP40347(^6)</td>
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<td>4.0</td>
<td>1.76</td>
<td>19.6</td>
<td>70</td>
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<td>CP40439(^6)</td>
<td>19.5</td>
<td>4.0</td>
<td>4.18</td>
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<td>CP404046(^6)</td>
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<td>55.7</td>
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<tr>
<td>CP40447(^6)</td>
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<td>4.0</td>
<td>3.15</td>
<td>32.0</td>
<td>70</td>
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<td>CP4055485(^6)</td>
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<td>4.0</td>
<td>5.97</td>
<td>63.0</td>
<td>70</td>
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</table>

**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 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.
CUI Devices | SERIES: CP40 | DESCRIPTION: PELTIER MODULE
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**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Conditions/Description</th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
<th>Units</th>
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<tbody>
<tr>
<td>solder melting temperature</td>
<td>connection between thermoelectric pairs CP40347, CP40447, CP40147, CP40247, CP402533</td>
<td>235</td>
<td>138</td>
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<td>°C</td>
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<td></td>
<td>CP40301547, CP404046, CP40439, CP4055485</td>
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<td></td>
<td></td>
<td>°C</td>
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<tr>
<td></td>
<td>all other models</td>
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<td>assembly compression</td>
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<td>MPa</td>
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**MECHANICAL DRAWING**

units: mm

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**Notes:**
1. Wire lead strip length on models CP40347, CP40447, CP40439, CP402533, & CP4055485 is 10 ±3.0 mm.

Additional Resources:  Product Page | 3D Model
CP40136 PERFORMANCE (Th=27°C)

ΔT=Th-Tc (°C)

Heat Pumped, Q (W)

Input Voltage (V)

3.9 A
3.12 A
2.34 A
1.56 A
0.78 A

CP40136 PERFORMANCE (Th=50°C)

ΔT=Th-Tc (°C)

Heat Pumped, Q (W)

Input Voltage (V)

3.9 A
3.12 A
2.34 A
1.56 A
0.78 A
CP40236 PERFORMANCE (Th=27°C)

CP40236 PERFORMANCE (Th=50°C)
CP40336 PERFORMANCE (Th=27°C)

ΔT=Th-Tc (°C)

Input Voltage (V)

Heat Pumped, Q (W)

CP40336 PERFORMANCE (Th=50°C)

ΔT=Th-Tc (°C)

Input Voltage (V)

Heat Pumped, Q (W)
CP40147 PERFORMANCE (Th=27°C)

CP40147 PERFORMANCE (Th=50°C)
CP40247 PERFORMANCE (Th=27°C)

Input Voltage (V) vs. Heat Pumped, Q (W) graph for different currents.

CP40247 PERFORMANCE (Th=50°C)

Input Voltage (V) vs. Heat Pumped, Q (W) graph for different currents.
CP402533 PERFORMANCE (Th=27°C)

![Graph](image1)

CP402533 PERFORMANCE (Th=50°C)

![Graph](image2)
CP40301547 PERFORMANCE (Th=27°C)

![Graph of Heat Pumped, Q (W) vs. Delta T (°C) for different Input Voltages (V) for CP40301547](image1)

CP40301547 PERFORMANCE (Th=50°C)

![Graph of Heat Pumped, Q (W) vs. Delta T (°C) for different Input Voltages (V) for CP40301547](image2)
**CP40347 PERFORMANCE (Th=27°C)**

![Graph of CP40347 PERFORMANCE (Th=27°C)](image)

**CP40347 PERFORMANCE (Th=50°C)**

![Graph of CP40347 PERFORMANCE (Th=50°C)](image)
CP40439 PERFORMANCE (Th=27°C)

CP40439 PERFORMANCE (Th=50°C)
CP404046 PERFORMANCE (Th=27°C)

CP404046 PERFORMANCE (Th=50°C)
CP40447 PERFORMANCE (Th=27°C)

CP40447 PERFORMANCE (Th=50°C)
**CP4055485 PERFORMANCE (Th=27°C)**

![Graph 1](image1)

**CP4055485 PERFORMANCE (Th=50°C)**

![Graph 2](image2)
## REVISION HISTORY

<table>
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<tr>
<th>rev.</th>
<th>description</th>
<th>date</th>
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<tr>
<td>1.0</td>
<td>initial release</td>
<td>09/03/2009</td>
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<td>1.01</td>
<td>applied new template</td>
<td>05/08/2012</td>
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<tr>
<td>1.02</td>
<td>added new models</td>
<td>09/08/2016</td>
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<td>1.03</td>
<td>changed models CP40347 &amp; CP40447 to arcTEC™ structure</td>
<td>12/01/2017</td>
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<td>1.04</td>
<td>changed thickness of CP40147, CP40247, CP40301547 models</td>
<td>09/19/2018</td>
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<td>1.05</td>
<td>added models CP40439, CP404046, CP4055485, brand update</td>
<td>10/18/2019</td>
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<tr>
<td>1.06</td>
<td>added model CP402533</td>
<td>11/17/2020</td>
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The revision history provided is for informational purposes only and is believed to be accurate.