FEATURES
- arcTEC™ structure
- enhanced reliability for high thermal cycling
- high Imax rating of 20 A
- silicon sealed
- wide ΔT max
- precise temperature control
- solid state construction

MODEL

<table>
<thead>
<tr>
<th>MODEL</th>
<th>input voltage max (Vdc)</th>
<th>input current max (A)</th>
<th>internal resistance typ (Ω±10%)</th>
<th>output Qmax&lt;sup&gt;4&lt;/sup&gt;</th>
<th>output ΔTmax&lt;sup&gt;2&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>CP200543636</td>
<td>8.5</td>
<td>20</td>
<td>0.33±0.05</td>
<td>96</td>
<td>70</td>
</tr>
</tbody>
</table>

Notes:
1. Maximum voltage at ΔT max and T<sub>h</sub>=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<sub>max</sub>, V<sub>max</sub>, and ΔT=0°C
5. Maximum temperature difference occurs at I<sub>max</sub>, V<sub>max</sub>, and Q=0W (ΔT max measured in a vacuum at 1.3 Pa)
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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</thead>
<tbody>
<tr>
<td>Solder melting temperature</td>
<td>connection between thermoelectric pairs</td>
<td>235</td>
<td></td>
<td></td>
<td>°C</td>
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<tr>
<td>Assembly compression</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td>MPa</td>
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<tr>
<td>RoHS</td>
<td></td>
<td>yes</td>
<td></td>
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</tbody>
</table>

MECHANICAL DRAWING

- **MATERIAL**
  - Ceramic plate: 96% Al₂O₃
  - Wire leads: 18 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.**
  - CP200543636

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Hot Side Length (mm)</th>
<th>Cold Side Length (mm)</th>
<th>Width (mm)</th>
<th>Thickness (mm)</th>
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</thead>
<tbody>
<tr>
<td>CP200543636</td>
<td>54 ±0.3</td>
<td>50 ±0.3</td>
<td>36 ±0.3</td>
<td>3.6 ±0.025</td>
</tr>
</tbody>
</table>
CP200543636 PERFORMANCE (Th=27°C)

![Graph showing performance at Th=27°C]

CP200543636 PERFORMANCE (Th=50°C)

![Graph showing performance at Th=50°C]
REVISION HISTORY

<table>
<thead>
<tr>
<th>rev.</th>
<th>description</th>
<th>date</th>
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<tr>
<td>1.0</td>
<td>initial release</td>
<td>11/12/2020</td>
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The revision history provided is for informational purposes only and is believed to be accurate.

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