Cooper Bussmann PowerStor supercapacitors are unique, ultra-high capacitance devices utilizing electrochemical double layer capacitor (EDLC) construction combined with new, high performance materials. This combination of advanced technologies allows Cooper Bussmann to offer a wide variety of capacitor solutions tailored to specific applications that range from a few micro-amps for several days to several amps for milliseconds.

Features & Benefits
- Low ESR with high energy density
- 5.0 Volts
- High capacitance
- Long cycle life
- Low leakage currents
- UL Recognized

Applications
- Pulse power
- Bridge or hold-up power

Specifications

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Nominal Capacitance (F)</th>
<th>Part Number</th>
<th>Nominal ESR (Ω) (Equivalent Series Resistance)</th>
<th>Nominal Leakage Current (μA) After 100 Hrs. @ 5V, 20°C</th>
<th>Nominal Dimensions (mm)</th>
<th>Typical Mass (grams/piece)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working Voltage</td>
<td>5.0V</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.4</td>
</tr>
<tr>
<td>Surge Voltage</td>
<td>5.5V</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.5</td>
</tr>
<tr>
<td>Nominal Capacitance</td>
<td>0.47 to 3.0F</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.4</td>
</tr>
<tr>
<td>Capacitance Tolerance</td>
<td>-20% to +80% (20°C)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.5</td>
</tr>
<tr>
<td>Operating Temperature Range</td>
<td>-40°C to 60°C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4.4</td>
</tr>
<tr>
<td>Extended Operating Temperature Range</td>
<td>-40°C to 85°C (Max. working voltage: 3.9V)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5.8</td>
</tr>
</tbody>
</table>

Performance

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Capacitance Change (% of specified value)</th>
<th>ESR (% of specified value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life (1000 hrs @ 60°C @ 5Vdc)</td>
<td>≤ 30%</td>
<td>≤ 200%</td>
</tr>
<tr>
<td>Storage - Low and High Temperature (1000 hrs @ -40°C and 60°C)</td>
<td>≤ 30%</td>
<td>≤ 200%</td>
</tr>
</tbody>
</table>
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### Dimensions (mm)

<table>
<thead>
<tr>
<th>Vertical Part#</th>
<th>Horizontal Part#</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>d'</th>
<th>D</th>
<th>D'</th>
<th>E</th>
<th>E'</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM-5R0V474-R</td>
<td>PM-5R0H474-R</td>
<td>9.0</td>
<td>17.3</td>
<td>14.5</td>
<td>0.5</td>
<td>20</td>
<td>15</td>
<td>25</td>
<td>20</td>
<td>2.0</td>
<td>11.8</td>
</tr>
<tr>
<td>PM-5R0V105-R</td>
<td>PM-5R0H105-R</td>
<td>9.0</td>
<td>17.3</td>
<td>22.0</td>
<td>0.5</td>
<td>20</td>
<td>15</td>
<td>25</td>
<td>20</td>
<td>2.0</td>
<td>11.8</td>
</tr>
<tr>
<td>PM-5R0V155-R</td>
<td>PM-5R0H155-R</td>
<td>11.0</td>
<td>21.3</td>
<td>23.0</td>
<td>0.6</td>
<td>20</td>
<td>15</td>
<td>25</td>
<td>20</td>
<td>2.0</td>
<td>5.3</td>
</tr>
<tr>
<td>PM-5R0V305-R</td>
<td>PM-5R0H305-R</td>
<td>11.0</td>
<td>21.3</td>
<td>32.5</td>
<td>0.6</td>
<td>20</td>
<td>15</td>
<td>25</td>
<td>20</td>
<td>2.0</td>
<td>5.3</td>
</tr>
</tbody>
</table>

**Tolerances**

<table>
<thead>
<tr>
<th></th>
<th>Maximum</th>
<th>Minimum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions</td>
<td>± 0.02</td>
<td>± 0.5</td>
</tr>
</tbody>
</table>

Note: Longer lead is positive.

**Part Numbering System**

- **P** = Pack
- **M** = Voltage (V)
- **S** = Series Code
- **R** = Configuration
- **0** = Capacitance (μF)
- **R** = RoHS

- **P = Pack**
- **M = Voltage (V)**
- **S = Series Code**
- **R = Configuration**
- **0 = Capacitance (μF)**
- **R = RoHS Compliant**

**Packaging Information**

- Standard packaging: Bulk, 100 units per package.
- Large, bulk packaging available upon request.

**Part Marking**

- Manufacturer
- Capacitance (F)
- Max. Operating Voltage (V)
- Series Code (or part number)
- Polarity

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