DC-Link Film Capacitors

### Overview

Metallized Polypropylene Film (MKP)
DC-Link capacitors use thin polypropylene film as their dielectric and are found in power converter circuits for DC filtering, and energy storage. These capacitors are stable over temperature, frequency and time. They have low DF, excellent self-healing capability, and long operational lifetimes.

### Device Applications

- Inverters
- Green Energy: Solar and Wind
- Automotive: Traction (C4E)
- On-Board Battery Charger
- Regenerative drives
- Motor Drives
- Welding Machines
- SMPS

### Benefits

- High Capacitance Density
- Extended life at >100,000 hours at VN at rated hot spot temperature
- High Reliability
- High ripple Current

### Applications

- DC link
- DC filtering
- Energy Storage

### DC-Link Film Capacitors

<table>
<thead>
<tr>
<th>Capacitor</th>
<th>Min C (μF)</th>
<th>Max C (μF)</th>
<th>Max. Voltage (Vdc)</th>
<th>Max. Temperature (°C)</th>
<th>Construction</th>
<th>Power Level (kVA)</th>
<th>Max. dv/dt (V/μs)</th>
<th>Harsh Environment</th>
<th>Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>C4AK</td>
<td>1.5</td>
<td>60</td>
<td>900 (2)</td>
<td>135</td>
<td>Radial Plastic Box 2/4 leads</td>
<td>Low</td>
<td>40</td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>C4AQ</td>
<td>1</td>
<td>210</td>
<td>1,500 (1)</td>
<td>125</td>
<td>Radial Plastic Box 2/4 leads</td>
<td>Medium</td>
<td>90</td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>C4AU</td>
<td>1</td>
<td>210</td>
<td>1,200 (2)</td>
<td>125</td>
<td>Radial Plastic Box 2/4 leads</td>
<td>Medium</td>
<td>90</td>
<td>•</td>
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<tr>
<td>C4DE</td>
<td>47</td>
<td>380</td>
<td>1,000</td>
<td>85</td>
<td>Plastic Canister</td>
<td>Medium</td>
<td>37</td>
<td>•</td>
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<tr>
<td>C44U-M</td>
<td>90</td>
<td>4,500</td>
<td>1,800</td>
<td>85</td>
<td>Metal Canister</td>
<td>High</td>
<td>19</td>
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<tr>
<td>C4E</td>
<td>100</td>
<td>1,800</td>
<td>1,800</td>
<td>105</td>
<td>Plastic &amp; Metal Brick</td>
<td>High</td>
<td>--</td>
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