Nippon Chemi-Con Corporation

September 20, 2013

High Capacitance Low - Resistance Products [3,000 F, 0.3 mΩ (typ.)] Added to the DXE Series Low - Resistance Electric Double Layer Capacitors

Nippon Chemi-Con Corporation has now developed a large product with a capacitance of 3,000 F and internal resistance of 0.3 mΩ (typ.) for the DXE series low resistance electric double layer capacitors (EDLC), which has proven car installation performance.

In recent years where environmental issues have become increasingly important, efficient use of energy as well as storage methods are placed under the spotlight from the point of view of reduction of CO₂ emission. Compared with other electrical energy storage devices, the EDLC have superior features such as long service life, fast charging and discharging, high safety, and small environmental load. The EDLC have a track record not only in the field of automobiles, but also in various other fields such as UPS, cranes, lifts, construction heavy machinery, and wind/solar power generation.

Technical Advantages:
The DXE series, thanks to its original resistance lowering technology, has reduced the internal resistance by 60% compared to conventional products of the same size (φ40 × 150 L mm products). Based on this technology, the large capacitance type products developed this time achieve a large capacitance of 3,000 F a low internal resistance of 0.3 mΩ (typ.) at the same time.

Specifications:
- Category temperature range: −40°C to +70°C
- Rated voltage: 2.5 V
- Capacitance: 3,000 F
- Capacitance tolerance: ±10%
- Case size: φ63.5 × 153 L mm
- Endurance: 2,000 hours at 70°C

Mass Production Schedule:
Mass production of DXE series with 3,000 F capacitance is planned to be started from February 2014.
## DXE Series

<table>
<thead>
<tr>
<th>Rated voltage [V]</th>
<th>Capacitance [F]</th>
<th>Size</th>
<th>DCIR (typ.) [mΩ]</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5</td>
<td>400</td>
<td>65</td>
<td>2.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>800</td>
<td>105</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1200</td>
<td>150</td>
<td>0.8</td>
<td>NEW</td>
</tr>
<tr>
<td></td>
<td>3000</td>
<td>63.5</td>
<td>0.3</td>
<td></td>
</tr>
</tbody>
</table>

![Diagram of DXE Series capacitor](image-url)