



## *Press Release*

Nippon Chemi-Con Corporation  
May 8, 2015

### **Development of a Low Resistance Electric Double Layer Capacitor with a Wide Temperature Range Category Temperature Range of -40 to +85°C Achieved**

Nippon Chemi-Con has successfully developed the "DXG Series" electric double layer capacitors that have increased the conventional category temperature range of -40 to +70°C to -40 to +85°C.

With programs to save energy, solve environmental problems and reduce CO2 emissions accelerating, equipment using electric double layer capacitors are being developed as clean and long life storage devices. The focus is on this equipment because it is being applied in a wide range of fields, such as the leveling of loads for natural energy sources, trains which produce a large amount of regenerative energy, cranes used in harbors, heavy construction equipment and for electric storage in automobiles.

At Nippon Chemi-Con we have been working on increasing the category temperature range, so that we can expand the market for these capacitors by making them more resistant to harsher temperature conditions.

The "DXG Series" that we have just completed developing has expanded the category temperature range to -40 to +85°C, so that they can be used in harsher temperature conditions. This product is targeted at the automobile and other markets, and we shall continue our efforts to get these new electric double layer capacitors and our existing capacitors to be used in a wider range of applications.

#### <<Technological Features>>

We analyzed the property deterioration mechanism of conventional electric double layer capacitors in high temperature conditions and by improving the material configuration we have been able to develop a cell that does not show much deterioration even at a high temperature of +85°C, and that displays minimal property changes even at a low temperature of -40°C.

The "DXG Series" that we have developed is planned to have a warranty of 1500 hours at a rated voltage of 2.5 V and a guaranteed temperature range of -40 to +85°C.

<<Main Specifications>>

- Category temperature range: -40 to +85°C
- Rated voltage: 2.5 V
- Capacitance (min.): 1000 F
- Capacitance tolerance: +30 to 0%
- Case size:  $\varnothing$ 40 x 150 L mm
- Endurance: Guaranteed for 1500 hours at 85°C

<<Production Location>>

Chemi-Con Yonezawa Corporation

<<Mass Production>>

Mass production is scheduled to start from July 2015.

<<Product Appearance>>

