



Press Release

Nippon Chemi-Con Corporation
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Screw Terminal Type Aluminum Electrolytic Capacitors RHB Series Mass production of high capacitance products with one of the highest withstand voltages in the industry (700V)

Nippon Chemi-Con has started mass production of high withstand voltage screw terminal type aluminum electrolytic capacitors RHB Series. The Series guarantees 2,000 hours at 85°C and has achieved a withstand voltage of 700V, one of the highest in the industry, and a high capacitance (3300 μ F at ϕ 89 x 155 Lmm).

This Series is suited for applications requiring instantaneous energy, such as welding machines and banks of X-ray power supplies. Conventionally, film capacitors were used in many of these devices. However, aluminum electrolytic capacitors have a higher capacitance per volume than film capacitors. By using this Series, advantages such as smaller and lighter capacitor banks and lower costs can be expected.

This Series is also designed for use in inverters for industrial equipment and is available in voltages 575V and 630V. Screw terminal type aluminum electrolytic capacitors are used as filtering capacitors in inverter systems which are essential for improving the efficiency of industrial equipment such as machine tools and industrial robots. By using this Series for such applications, the number of capacitors connected in series can be reduced, leading to the downsizing of equipment. Furthermore, the balance resistance and the number of busbars can be reduced by using serial connection.

[Technical Features]

In the development of the 700V product, a newly designed aluminum electrode foil was developed in-house to achieve higher capacitance in the ultra-high withstand voltage range. At the same time, the breakdown voltage of the electrolyte was increased to 800V and higher using our proprietary high withstand voltage technology. Furthermore, in terms of structure, the same special structure as our 650V products has been adopted to achieve both high withstand voltage and reliability.

In addition, the 575V and 630V products have been downsized and reduced in cost by reviewing their withstand voltage designs.

[Mass Production]

Mass production of the RHB Series started in July 2016 at Chemi-Con Fukushima Corp. (a wholly owned subsidiary of Nippon Chemi-Con)

[Main Specifications]

- Category temperature range: -25°C to +85°C
- Endurance: guarantees 2,000 hours at 85°C
- Rated voltage range: 575 to 700V
- Capacitance range: 1000 to 5600 μ F
- Case size: ϕ 63.5 x 70 to ϕ 89 x 155 Lmm
- Rated ripple current: 3.8 to 12.7 Arms

[Product Appearance]

