

# Press Release

Nippon Chemi-Con Corporation October 5, 2021

#### Snap-in Type Aluminum Electrolytic Capacitors KHE Series Approximately 20% higher capacitance achieved with upgrade

Nippon Chemi-Con has updated snap-in type aluminum electrolytic capacitors KHE Series for input smoothing of power supplies. The Series contributes to downsizing and thinning of switching power supplies and general-purpose inverters.

Snap-in type aluminum electrolytic capacitors are mainly used for smoothing circuits of switching power supplies. The spread of cloud services has led to a recent increase in demand of products for data center servers, and expansion of markets related to IT and communications infrastructure has become noticeable. We released the ultracompact KHE Series in January 2020 to meet the demand for downsizing and space saving of these power supplies.

However, the demand for downsizing and space saving of power supplies in the market has become stronger and the downsizing of aluminum electrolytic capacitors, which are passive components, has become a continuous technical issue. From this background, we aimed for further downsizing and continued development to upgrade the performance of the KHE Series.

The rated voltage and sizes of the upgraded KHE Series are the same as the existing products, each having 400 to 450V and  $\varnothing 25.4 \times 25 L$  to  $\varnothing 35 \times 60 L$ mm. The capacitance range is  $210 \mu F$  to  $1{,}500 \mu F$ , achieving a maximum of approximately 20% higher capacitance per volume compared to the existing KHE Series. In this development, we have achieved performance improvement by adopting new materials for higher capacitance and reliability whilst maintaining the basic performances of the existing KHE Series.

#### Samples and Mass Production

Samples and mass production of the upgraded KHE Series has been available since September 2021.

#### **Main Specifications**

- Category temperature range: -40°C to +105°C
- Rated voltage range: 400V to 450V
- Capacitance range: 210µF to 1,500µF
- Case size: Ø25.4×25L to Ø35×60Lmm
- Endurance: guarantees 2,000 hours at 105°C

### **Production Site**

Chemi-Con East Japan Corp. Fukushima Plant

## Product Appearance



Upgraded KHE Series - 450V-1,000 $\mu$ F,  $\emptyset$ 30×60Lmm size product