

## **NICHICON Develops a Miniaturized Snap-In Aluminum Electrolytic Capacitor with a Long Lifespan (5,000 Hours at 105°C)**

NICHICON CORPORATION

Karasumadori Oike-agaru, Nakagyo-ku, Kyoto

Phone: +81-75-231-8461

Inquiries: Masanobu Seki, Operating Officer and  
General Manager, Capacitor Business Headquarters

NICHICON CORPORATION has developed a miniaturized snap-in aluminum electrolytic capacitor with a long lifespan (5,000 hours at 105°C) for the electric power supply industry, which has been advancing in terms of miniaturization and efficiency in recent years.

### **Overview and Development Background**

Demand for miniaturization and space-saving in the server power supply/switched-mode power supply field has been strong in recent years as internal space decreases due to circuit integration. Meanwhile, the internal temperature of power supplies is trending upwards. Under these conditions, there is demand for the large aluminum electrolytic capacitors used in power supply smoothing circuits to be miniaturized and made highly reliable (long lifespan). To meet these demands, NICHICON reduced the size (maximum volume reduction of 28%) of the current LGX series (5,000 hours at 105°C) to develop the smallest product on the market that meets these specs.

### **Features**

To achieve miniaturization, NICHICON employs a newly developed high-capacitance aluminum electrode foil as the main material for this product. It also incorporates electrolytic paper optimized for electrolyte retention to achieve a long lifespan. Employing this product in set devices can contribute to miniaturization.

### **Main Specifications**

Rated voltage range	450 V DC
Rated capacitance range	120 to 1000 $\mu$ F

Category temperature range	-25 to +105°C
Product dimensions	Φ22×25L to φ35×60L (mm) (28 sizes)
Life	5,000 hours at 105°C
Terminal shape	Snap-in type
Samples	From September 2020
Mass production	From January 2021 [Planned production volume: 300,000/month]
Production plant	NICHICON (OHNO) CORPORATION, No. 3 Factory 4085 Toyoshina, Azumino, Fukui Prefecture (ISO 9001, IATF 16949, and ISO 14001 certified)



**Miniaturized snap-in aluminum electrolytic capacitor  
with a long lifespan (5,000 hours at 105°C)**