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## **NICHICON Develops the LGC Series of Miniature Snap-In Aluminum Electrolytic Capacitors with Long Life (Guaranteed for 5,000 Hours at 105°C)**

NICHICON CORPORATION

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NICHICON CORPORATION has developed the LGC series, the industry's smallest snap-in aluminum electrolytic capacitors with long life (guaranteed for 5,000 hours at 105°C) to meet the demand—mainly from the environmental and renewable energy fields.

NICHICON will exhibit the series at TECHNO-FRONTIER 2021's 36th Power System Japan Expo.

### **Overview and Development Background**

In recent years, there has been a strong demand for more compact server power supplies and switching power supplies. As circuits are integrated, the space inside of power supplies is decreasing resulting in their internal temperatures increasing. This means the large aluminum electrolytic capacitors used in smoothing circuits to be more compact and have a long life. NICHICON has developed the new LGC series to meet these requirements. The series is the industry's smallest, having been reduced in volume by up to 33% from the current LGX series (guaranteed for 5000 hours at 105°C).

### **Features**

The LGC series achieves the smallest product dimensions in the industry by utilizing a newly developed high-capacity electrode foil and highly durable electrolytic solution and electrolytic paper. The series is up to 33% smaller (by volume) than the current LGX series, making it ideal for space-saving circuit designs.

## Product Size Comparison

Product Rating	Current Product LGX series	Development Product LGC series	Volume Ratio
500V / 100 $\mu$ F	$\phi$ 22 $\times$ 40L	$\phi$ 22 $\times$ 30L	-25%
500V / 220 $\mu$ F	$\phi$ 30 $\times$ 45L	$\phi$ 30 $\times$ 30L	-33%
500V / 390 $\mu$ F	$\phi$ 35 $\times$ 50L	$\phi$ 35 $\times$ 40L	-20%

## Main Specifications

Rated voltage range:	500V
Rated capacitance range:	68 to 680 $\mu$ F
Category temperature range:	-40 to 105 $^{\circ}$ C
Product dimensions:	$\phi$ 22 $\times$ 25L to $\phi$ 35 $\times$ 55L (mm) (25 sizes)
Life:	5,000 hours guaranteed at 105 $^{\circ}$ C
Terminal shape:	Snap-in terminal-type
Samples	From June 2021
Mass production:	From October 2021
Production plant:	Nichicon (Ohno) Corporation, Site III Factory 4085 Toyoshina, Azumino, Nagano Prefecture, JAPAN (ISO9001, IATF16949, and ISO14001 certified)

Production is scheduled to commence sequentially at the following overseas factories.

NICHICON ELECTRONICS (WUXI) CO., LTD.  
Block 51-B, Wuxi National High & New Technology Industrial  
Development Zone, Wuxi, Jiangsu, China 214028  
(ISO9001, IATF16949, and ISO14001 certified)

NICHICON (MALAYSIA) SDN. BHD.  
No.4 Jalan P/10, Kawasan Perusahaan Bangi, 43650 Bandar Baru  
Bangi, Selangor Darul Ehsan, Malaysia  
(ISO9001, IATF16949, and ISO14001 certified)



**The LGC series of miniature snap-in aluminum electrolytic capacitors with long life (guaranteed for 5,000 hours at 105°C)**