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NICHICON Adds 2.5V-Rated Models to the PCL Series of Chip-Type Conductive Polymer Aluminum Solid Electrolytic Capacitors with Long Life and Reliability

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NICHICON CORPORATION expanded the voltage range of the PCL series (chip-type conductive polymer aluminum solid electrolytic capacitors) originally launched in October 2018 to include 2.5V, this brings the PCL series voltage range from 2.5V to 25V. These products guarantee 20,000 hours of operation at 105°C. This is the longest endurance rating in the industry.

The new series will be exhibited at CEATEC 2020 ONLINE, held from Tuesday, October 20, to Friday, October 23.

Overview and Development Background

Conductive polymer aluminum solid electrolytic capacitors, which use conductive polymer electrolytes, feature superior equivalent series resistance (ESR) characteristics at high frequencies and excellent allowable ripple currents. IoT devices and communication infrastructure equipment has expanded in recent years, driven by IoT integration in home electronics and 5th generation mobile communication (5G) technologies.

Circuit drive voltages are broadening with the diversification of electronic devices. There are demands for reductions in the maintenance of communication infrastructure equipment as the trend toward using such equipment over a longer period of time increases. In response to the market need for capacitors in a wide range of voltage ratings, NICHICON added a 2.5V-rated model to its lineup of the PCL series (chip-type conductive polymer aluminum solid electrolytic capacitors with long life and reliability).

Features

NICHICON enhanced its conductive polymer aluminum solid electrolytic capacitor technology and further optimized the raw materials and material design

to produce the additions to the PCL series. Customers now have a wider range of voltages to choose from, helping them in reducing the frequency of maintenance and lengthens the life of their products.

Main Specifications

Note: Figures in parentheses indicate ratings for the newly added model.

Rated voltage range	2.5 to 25 V DC (2.5 V)
Rated capacitance range	12 to 3300 μ F (270 to 3300 μ F)
Category temperature range	-55 to +105°C
Product dimensions	ϕ 5 \times 6L, ϕ 10 \times 12.7L (mm) (seven sizes) (ϕ 5 \times 6L, ϕ 10 \times 12.7L (mm) (five sizes)
Life	20,000 hours at 105°C
Terminal shape	Chip type
Samples	From October 2020 (newly added model)
Mass production	From December 2020 (newly added model) [Planned production volume: 1 million/month]
Production plant	NICHICON (OHNO) CORPORATION, SITE II Factory 4-24-15 Technology Center, Tsuchifugo, Ono, Fukui Prefecture (ISO 9001, IATF 16949, and ISO 14001 certified)



PCL series of chip-type conductive polymer aluminum solid electrolytic capacitors with long life and reliability