

NICHICON Develops and Launches the LHX Series of Snap-in Terminal Type Aluminum Electrolytic Capacitors with High Temperature and Long-Life (Guaranteed for 5,000 hours at 125°C)

NICHICON CORPORATION has developed and launched the LHX series of snap-in terminal type aluminum electrolytic capacitors with high temperature and long-life (guaranteed for 5,000 hours at 125°C) primarily for use in power supplies for communication base stations. The new series meets the demand for increased operating temperature range of equipment.

Overview and Development Background

In power supplies for communication base stations and the environmental and renewable energy industry, power supplies are increasingly moving toward fanless and hermetically sealed designs for maintenance-free operation due to the need to function under harsh environmental conditions and in unmanned remote areas. In addition, the internal temperatures of equipment are becoming higher as a result of denser component mounting, higher power output due to increased data transmission, and the use of next-generation power devices (GaN and SiC), which require capacitors that can handle higher temperatures and have longer life. To meet these market needs, NICHICON has developed and launched the LHX series. The series has the same rated voltage, capacitance, dimensions, and rated ripple current as the current LHT series (which guarantees 3,000 hours of operation at 125°C), but with a longer life of 5,000 hours at 125°C.

Features

The LHX series delivers the industry's highest heat resistance and longest life through the use of a highly reliable electrolyte and electrode foil that are durable at high temperatures, electrolytic paper with high electrolyte retention capacity that helps to extend product life, and a structure that suppresses electrolyte evaporation. The new LHX series achieves a lifespan that is approximately 1.6 times longer than the existing LHT series, with the same rated voltage, capacitance, dimensions, and rated ripple current.

Main Specifications

•Series : LHX Series

•Rated voltage : 450V

•Rated capacitance range : $220\mu\text{F}$ to $680\mu\text{F}$ •Category temperature range : -40°C to 125°C

Product dimensions : Ø30mm×30mmL to Ø35mm×60mm L
Life : Guaranteed for 5,000 hours at 125°C
(Rated ripple current superimposed)

Terminal shape
Samples
Currently available
Mass production launch
From October 2024

• Production plant : NICHICON (OHNO) CORPORATION, Nagano Factory

4085 Toyoshina, Azumino, Nagano Prefecture, JAPAN (ISO9001, IATF16949, and ISO14001 certified)

Production is also scheduled to gradually start at overseas factories.

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(ISO9001, IATF16949, and ISO14001 certified)

Product Appearance





LHX series of snap-in aluminum electrolytic capacitors

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