NICHICON Develops UBH Series of Aluminum Electrolytic Capacitors Guaranteed for 2,000 Hours at 150°C

In recent years, the increase in automotive onboard electronics being installed in close to the engine compartment necessitates that aluminum electrolytic capacitors be extremely heat resistant. NICHICON CORPORATION developed the UBH series of aluminum electrolytic capacitors with an operating temperature of up to 150°C and rated life of 2,000 hours to handle extremely hot environments.

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

Overview and Development Background

Previously, NICHICON had launched the UBC series (guaranteed operation for 1,000 hours at 150°C). The new UBH series (2,000 hours at 150°C) has higher capacitance and longer life while offering low ESR.

The new products are expected to contribute to reduced mounting space, higher performance, and longer life in a variety of applications in extremely high-temperature environments that our current lineup is unable to withstand.

Features

In addition to improvements in materials and the manufacturing process, the new products achieve a rated operating temperature of 150°C and low ESR from the use of a low-evaporation, low-resistance electrolyte. The products have the longest rated life of 2,000 hours for capacitors sized φ8 and φ10 along with guaranteed ESR at low temperatures, enabling increased performance and lengthened life for devices. Using UBH series capacitors can contribute to miniaturization and reduce production costs since they offer up to 1.5 times the capacitance of the existing 150°C-rated UBC series.
Main Specifications

- **Rated voltage range:** 25 to 35V
- **Rated capacitance range:** 100 to 270μF
- **Category temperature range:** -40 to +150°C
- **Product dimensions:** Φ8×10L to φ10×10L (mm) (two sizes)
- **Life:** 2,000 hours guaranteed at 150°C
- **Terminal shape:** Chip type (Vibration Resistance)
- **Samples:** From January 2021
- **Mass production:** From April 2021 [Planned production volume: 500 thousand/month]
- **Production plant:** NICHICON (IWATE) CORPORATION
  8-17-1, Kubo, Iwate-cho Iwate-gun, Iwate Prefecture
  (ISO 9001, IATF 16949, and ISO 14001 certified)

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