

Tech Topics: Audio Capacitors



Back to Basics

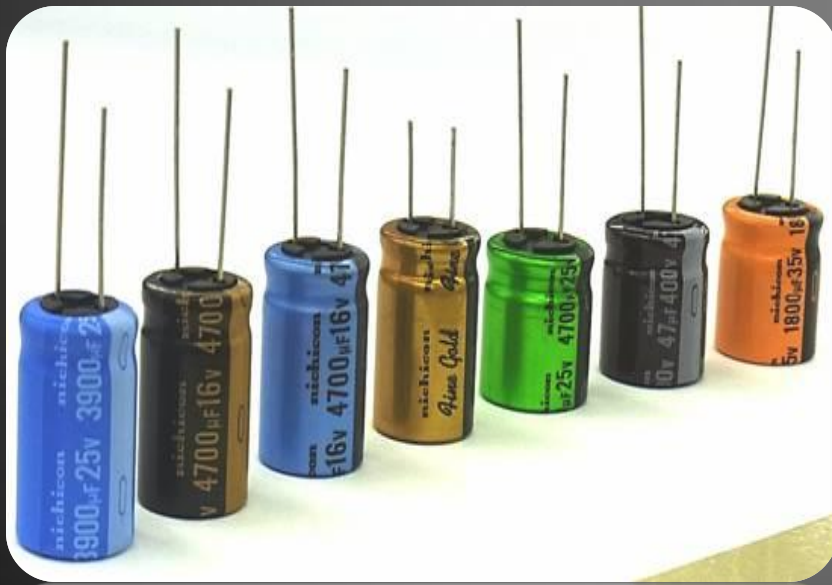
Nichicon Advantages



- Widest Selection in the Industry
- Premium Materials for Customized Sound
- Multiple Lead Configuration options

Nichicon Advantages

- Widest Selection in the Industry



nichicon



- KZ series and ES series
 - Premium Grade

Fine Gold

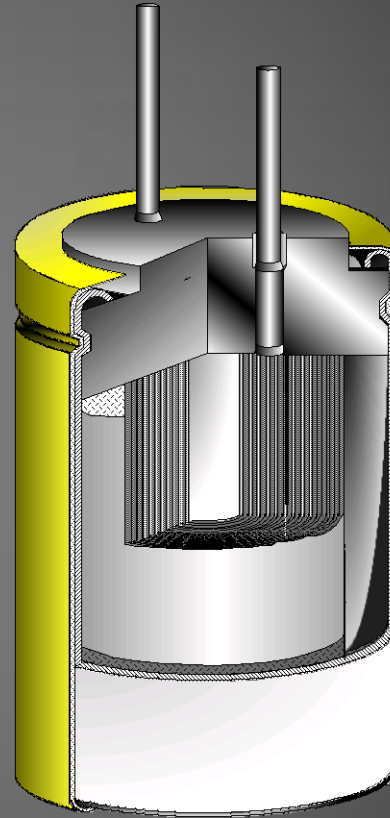
- FG series
 - Rich to High Sound

Super Through

- KG series
 - High Fidelity Sound

Nichicon Advantages

- Premium Materials for Customized Sound
 - Foil
 - Copper Core Wire
 - Harder Rubber End Seal



Nichicon Advantage

- Multiple Lead Configuration options
 - Radial
 - Snap-in
 - Surface Mount



Applications/Focus Markets

- **Audio Equipment**
 - Amplifier
 - DVD, Blu-Ray players
 - Audio Signal Circuits
 - Crossover Networks



Nichicon: High Quality Sound



- **Widest Selection in the Industry**
- **Premium Materials for Customized Sound**
- **Multiple Lead Configuration options**

For More Information



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nichicon **TECH TOPICS**

November 2006 Volume 1, Number 1

In This Issue

- Electric Double Layer Capacitors (EDLC)
- The EverCAP
- Markets
- Applications

Advantage: Packaging being done in the South then the more the capacity can meet.

Advantage: Since a generally thinner takes less energy.

Advantage: Packaging lead and twice the media.

Advantage: A unique battery's die leads provided the EDLC must be.

Advantage: EDLC is a success.

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nichicon **Tech Topics**

September 2010

In This Issue

- New Frontload Low Profile Tantalum Series
- Key Advantages
- Markets
- Applications
- Catalog Specifications

The F98 re

The F98 re provides an of conduct same capac extended re two types, a capacitor of ETL because the inductor's spring, a 3T.

There are a:

- Advantage #1:** Due to tank can be also capacitor, two times it.
- Advantage #2:** The F98 re offers with characterized the applicat
- Advantage #3:** Tantalum's
- Advantage #4:** Reduce can of the tank temperature
- Advantage #5:** Tantalum's

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nichicon **Tech Topics**

January 2010

In This Issue

- Polymer Capacitors
- Key Advantages
- Markets
- Applications

Nichicon's New FPCAP Polymer Capacitors

Advantage #1: Polymer capacitors provide electrical

Advantage #2: It has the high rate greatly reduced a reaction.

Advantage #3: Its polymer film high

Advantage #4: It is and capacitor

Advantage #5: G

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nichicon **Tech Topics**

October 2010

In This Issue

- Electric Double Layer Capacitors (EDLC)
- The Newest EverCAP-UV
- Markets
- Applications

UV Series-Electric Double-Layer Capacitor (EDLC)

For many years, rechargeable batteries were the only solution for temporary memory backup of data or timing clocks in various electronic devices. They have also been used as an emergency or short-term secondary power source during the events when the primary power source was not sufficient. Recent advances in capacitor development have made the electric double-layer capacitors (EDLCs) a viable alternative.

There are many advantages to the EDLC:

- Advantage #1: Longer Life**
Rechargeable batteries typically have 500 to 1000 life cycles. After being charged and discharged a few hundred times, the capacity of the batteries starts to decrease. Eventually, they will lose most of their storage capacity. An EDLC can be charged and discharged for more than a million times without any reduction in its storage capacity. If an EDLC can be used in conjunction with the battery, it can increase the battery's life.
- Advantage #2: Faster Charging Times**
Since a rechargeable battery stores energy by chemical reactions, it generally takes much longer to recharge, usually about an hour. Whereas the EDLC stores energy by the movement of ions, it usually takes from 1 to 30 seconds, therefore, it recharges much faster. Hence, the EDLC is a much better choice.
- Advantage #3: Lighter and Safer**
Rechargeable batteries usually contain heavy and harmful metals like lead and cadmium. As the size increases, they could weigh more than twice that of an EDLC of the same volume. EDLCs don't contain harmful metals and are environmentally friendly.
- Advantage #4: No Limitation for the Charging Current**
A current limiting circuit is sometimes needed when a rechargeable battery is used to prevent any rush charging current from damaging the battery. The EDLC has no limitation for the charging circuit provided the charging voltage does not exceed the rated voltage of the EDLC. Please note that if high ripple current, high pulse current and/or high charge and discharge currents are applied to the capacitor, the internal temperature rise generated by self-heating of the capacitor may cause deterioration greater than one might expect.

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• New Products
 • Product Upgrades
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