JANTZEN AUDIO

Alumen Z-Cap

PURE ALUMINUM FOIL CAPACITOR

PRODUCT FEATURES

The Alumen Z-Cap is a high-end pure aluminum foil capacitor, designed specifically for passive crossovers (tweeters and midrange drivers).

It utilizes a much thinner dielectric insulation compared to the market standard.

A high voltage rating is not needed for application related to passive loudspeaker crossovers.

The usage of a thinner dielectric insulator allows for a capacitors with less “memory” and one that is much faster reacting.

The Alumen Z-Cap offers unparalleled value for money in terms of cost versus performance.

Compared to the Superior and Silver Z-Caps (Super MKP / double metallized polypropylene foil) capacitors, the Alumen Z-Cap will bring less brightness and a little more natural top end balance to your system.

Ideal for audio aficionados who prefer a slightly less bright system, while also hearing improvements in the overall naturalness/neutrality of the whole system.

Due to the max. 100 volts DC voltage rating, they are not suitable for tube/valve and power amplifier application.

For upgrading the coupling capacitors in amplifiers, we instead recommend choosing our Amber Z-Caps C&B (600 VDC) or our Superior or Silver Z-Caps Double-foil Super MKP capacitors (800-1200 VDC).

KEY INNOVATIONS

- We use the thinnest possible dielectric insulation to eliminate memory effect in the capacitor
- An extremely fast reacting capacitor
- Very low ESR, SEL, inductance and dielectric absorption data
- High quality pure aluminum foil wound with high precision using specialized winding machinery
- Specifically designed for the tweeter and upper mid-range sections on passive crossovers
- Can also be used as coupling capacitors for transistor amplifiers

TECHNICAL DATA (Part 1 of 2)

Type: Non polarized pure aluminum foil capacitor

Dielectric: Polypropylene film

Construction: Four-layer round tubular type axial leads

Winding: Aluminum foil spliced to polypropylene insulation film

Rated Voltage: 100 VDC / 65 VAC

Test Voltage: 150% rated voltage

Electrodes: Pure copper foil

Contacts: Non-inductive zinc thermally sprayed extended film

Coating: Gray plastic tape wrapped black resin, sealed in an anodized aluminum tube

Leads: Tin plated oxygen free copper (99,99% purity)

Capacity Range: 100VDC from 1.0 µF to 10µF

Capacity tolerance: ±3% (on nominal value)

Dielectric constant: Non-polar dielectric

Dissipation factor: Extremely low

Dielectric absorption factor: ＜0.5% @20℃

TECHNICAL DATA (Part 2 of 2)

Dielectric thickness: PB=4µm

Equivalent series resistance: Extremely low

Self-inductance: 0 nH

Insulation resistance: ＞100.000 MΩ@20℃

Temperature coefficient: -200℃x10^{-}6/℃

Temperature Range: -55℃to +85℃

Metal layer thickness: PB=0.3µm

Metal layer conductivity: PB =1.2 Ω/cm^2