

JANTZEN AUDIO

Amber Z-Cap

PURE COPPER FOIL CAPACITOR



PRODUCT FEATURES

The Amber Z-Cap is a super high-end pure copper foil capacitor, designed specifically for passive crossovers.

They are primarily meant for the tweeter section of crossovers but work equally well for upper mid-range application.

The Amber Z-Cap builds on the same design principles of our already critically acclaimed Alumen Z-Caps.

The differences between the two are subtle, but to the connoisseur listener, the listening experience will still be a clear improvement in the overall tonal balance.

Copper foil gives the capacitor an even better sonic “flavor” compared to aluminum foil.

The sonic “flavor” of copper foil is best described as giving an even more neutral/natural depiction of vocals and instruments compared to the Alumen Z-cap.

This is paired with the enhancements in transparency and detail richness on an even higher level compared metalized polypropylene foil capacitors (MKP / Super MKP capacitors).

Due to the max. 200 volts DC voltage rating, we advise customers to be mindful when using Amber Z-Caps for tube/valve and power amplifier application.

For upgrading the coupling capacitors in amplifiers, we instead recommend choosing our Superior or Silver Z-Caps capacitors.

KEY INNOVATIONS

- An ultra-fast reacting super pure copper foil capacitor
- The thinnest possible dielectric insulation is used to eliminate memory effect in the capacitor
- Extremely low ESR, SEL, inductance and dielectric absorption data
- High quality pure copper foil wound with high precision on specialized winding machinery
- Specifically designed for the tweeter and mid-range section of passive crossovers
- Can also be used as coupling capacitors for transistor amplifiers

TECHNICAL DATA (Part 1 of 2)

Type: Non polarized pure copper foil capacitor

Dielectric: Polypropylene film

Construction: Four-layer round tubular type axial leads

Winding: Pure solid copper foil spliced to polypropylene insulation film

Voltage Rating: 200VDC / 160VAC

Test Voltage: 150% rated voltage

Electrodes: Pure copper foil

Contacts: Non-inductive zinc thermally sprayed extended film

Coating: Bronze plastic tape wrapped black resin, sealed in a copper colored anodized aluminum tube

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

Capacity Range: 200VDC from 1.0 μ F to 8.2 μ F

Capacity tolerance: $\pm 5\%$ (on nominal value)

Dielectric constant: Non-polar dielectric

Dissipation factor: Extremely low

Dielectric absorption factor: $< 0.5\%$ @20°C

TECHNICAL DATA (Part 2 of 2)

Dielectric thickness: PB=5 μ m

Equivalent series resistance: Extremely low

Self-inductance: 0 nH

Insulation resistance: $> 100.000 \text{ M}\Omega @ 20^\circ\text{C}$

Temperature coefficient: $-200^\circ\text{C} \times 10^{-6} / ^\circ\text{C}$

Temperature Range: -55°C to $+85^\circ\text{C}$

Metal layer thickness: PB=0.3 μ m

Metal layer conductivity: PB = $1.2 \text{ }\Omega/\text{cm}^2$