

# JANTZEN AUDIO

## AMBER Z-CAP

PURE COPPER FOIL CAPACITOR



**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 (Double-foil Super MKP capacitors).**

# PRODUCT FEATURES

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

They are also equally well suited for mid-range application, but due to the price point of these super high-end capacitors, they will most often be used for tweeter 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 has a noticeable positive impact on the “flavor” of the sound.

This “flavor” of copper foil is best described as an even more neutral/natural depiction of vocals and instruments.

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

# KEY INNOVATIONS

- An extremely fast reacting capacitor
- Ultra-thin dielectric insulation to eliminate memory effect in the capacitor
- Extremely low ESR, SEL, inductance and dielectric absorption data
- High quality pure copper foil wound with highly specialized machinery and precision winding techniques
- The center of the capacitor is enforced by small steel balls to further ensure stability and shape of the capacitor
- The specialized winding technique and overall quality of this capacitor enables us to offer a high-end product with a lot less distortion compared to the market standard
- 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:** Copper foil spliced to polypropylene insulation film

**Rated Voltage:** 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 pure copper

**Capacitance Range:** 200VDC from 1.0  $\mu$ F to 8.2 $\mu$ F

**Capacitance 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 $\mu$ m

**Equivalent series resistance:** Extremely low

**Self-inductance:** 0 nH

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

**Temperature coefficient:** -200 $^{\circ}$ Cx10 $^{-6}$ / $^{\circ}$ C

**Temperature Range:** -55 $^{\circ}$ Cto +85 $^{\circ}$ C

**Metal layer thickness:** PB=0.3 $\mu$ m

**Metal layer conductivity:** PB =1.2  $\Omega$ /cm $^2$

# VALUES AND SIZES

- ▶ 1,00 $\mu$ F ( $\emptyset$  26mm - L: 86mm) (Product Index: 001-7222)
- ▶ 1,50 $\mu$ F ( $\emptyset$  26mm - L: 86mm) (Product Index: 001-7224)
- ▶ 2,20 $\mu$ F ( $\emptyset$  30mm - L: 86mm) (Product Index: 001-7228)
- ▶ 2,70 $\mu$ F ( $\emptyset$  30mm - L: 86mm) (Product Index: 001-7230)
- ▶ 3,30 $\mu$ F ( $\emptyset$  30mm - L: 86mm) (Product Index: 001-7235)
- ▶ 3,90 $\mu$ F ( $\emptyset$  36mm - L: 96mm) (Product Index: 001-7237)
- ▶ 4,70 $\mu$ F ( $\emptyset$  51mm - L: 96mm) (Product Index: 001-7240)
- ▶ 5,60 $\mu$ F ( $\emptyset$  51mm - L: 96mm) (Product Index: 001-7243)
- ▶ 6,80 $\mu$ F ( $\emptyset$  62mm - L: 96mm) (Product Index: 001-7250)
- ▶ 8,20 $\mu$ F ( $\emptyset$  62mm - L: 96mm) (Product Index: 001-7253)