

JANTZEN AUDIO

PREMIUM ELKO

SMOOTH FOIL ELECTROLYTIC CAPACITOR



PRODUCT FEATURE

The Premium ELKO is made with a smooth foil to allow for low loss.

The smooth foil also provides better performance and sonic properties for audio application, compared to a standard type electrolytic capacitor.

These high quality electrolytic capacitors have a capacitance tolerance of only +/- 5%, compared to the market standard of +/- 10% or 20%

Premium ELKOs are in small in size and offers good performance on crossovers, where sizing is an important factor.

These capacitors are especially excellent for the bass section of crossovers, due to their reasonable pricing in high capacitance values.

Due to technical limitations, the Premium ELKOs are only available in maximum 100 μ F, but due to their relatively small size, multiple capacitors can easily be coupled to make higher capacitance values

TECHNICAL DATA (Part 1 of 2)

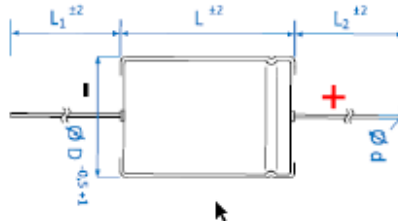
- Capacitor foil: Aluminum electrolytic / metal oxide layer
- Primary and secondary aluminum foils that offers AC voltage resistance, which make them highly suitable for audio application.
- Voltage rating: 70 VDC / 50 VAC
- Capacitance tolerance: +/- 5% (on nominal value)
- Temperature range: - 40C to + 85C
- Life span: [UR · R~] 5000 hours at +85°C/+185°F
- Loss angle: $\tan \delta = \underline{0.025@1\text{kHz}}$
- Signal direction: Non (non-polarised capacitor)

TECHNICAL DATA (Part 2 of 2)

Version: 1

ROHS compliant

Preliminary Series Data Sheet



Electrical Parameters

| | | | | | | | | | | |
|--|--|---------------------------------|-----------------------------|-----------------------------|-----------------------------|-------------------------|-----------|-------------------------|---------------------|------------------------|
| Reverse Voltage (U_R) max. 1 s | 2 V | | | | | | | | | |
| Capacity Tolerance | ±5 % | | | | | | | | | Unless otherwise noted |
| ESL typ. | 20 nH | | | | | | | | | |
| IEC Climatic category / Standards | 40/85/56 (-40 °C to +85 °C) | | | | | | | | | IEC 60384-4 |
| Leakage Current (I_L) $U_R / 5 \text{ min} / 20 \text{ °C}$ | $0,006 * C_R [\mu\text{F}] * U_R [\text{V}] [\mu\text{A}]$ | | | | | | | | | |
| all measurements @ 100 Hz / 20 °C | Rated Cap. (C_R) [μF] | Rated Volt. (U_R) [V] | Tan δ typ. [%] | ESR typ. [Ω] | Rated ripple current [A] | $\varnothing D$ [mm] | L [mm] | $\varnothing d$ [mm] | L_1 / L_2 [mm] | Customer part number |
| ATBIG3,305010030 | 3,3 | 50 | 4 | 24,1 | 0,07 | 10 | 30 | 0,8 | 45 | ECAP70.JA-3,30 |
| ATBIG3,605010030 | 3,6 | 50 | 4 | 24,1 | 0,07 | 10 | 30 | 0,8 | 45 | ECAP70.JA-3,60 |
| ATBIG3,905010030 | 3,9 | 50 | 4 | 20,4 | 0,07 | 10 | 30 | 0,8 | 45 | ECAP70.JA-3,90 |
| ATBIG4,705012030 | 4,7 | 50 | 4 | 16,9 | 0,07 | 12 | 30 | 0,8 | 45 | ECAP70.JA-4,70 |
| ATBIG6,805014030 | 6,8 | 50 | 4 | 11,7 | 0,09 | 14 | 30 | 0,8 | 45 | ECAP70.JA-6,80 |
| ATBIG8,205014037 | 8,2 | 50 | 4 | 9,5 | 0,1 | 14 | 37 | 0,8 | 45 | ECAP70.JA-8,20 |
| ATBIG10005014037 | 10 | 50 | 4 | 7,9 | 0,11 | 14 | 37 | 0,8 | 45 | ECAP70.JA-10 |
| ATBIG12005016039 | 12 | 50 | 4 | 6,6 | 0,14 | 16 | 39 | 0,8 | 45 | ECAP70.JA-12 |
| ATBIG15005018039 | 15 | 50 | 4 | 5,3 | 0,17 | 18 | 39 | 0,8 | 45 | ECAP70.JA-15 |
| ATBIG22005025038 | 22 | 50 | 4 | 3,6 | 0,24 | 25 | 38 | 0,8 | 45 | ECAP70.JA-22 |
| ATBIG33005025038 | 33 | 50 | 4 | 2,4 | 0,29 | 25 | 38 | 0,8 | 45 | ECAP70.JA-33 |
| ATBIG47005025049 | 47 | 50 | 4 | 1,7 | 0,38 | 25 | 49 | 0,8 | 45 | ECAP70.JA-47 |
| ATBIG56005025049 | 56 | 50 | 4 | 1,4 | 0,42 | 25 | 49 | 0,8 | 45 | ECAP70.JA-56 |
| ATBIG68005030049 | 68 | 50 | 4 | 1,2 | 0,5 | 30 | 49 | 0,8 | 45 | ECAP70.JA-68 |
| ATBIG82005030049 | 82 | 50 | 4 | 1 | 0,55 | 30 | 49 | 0,8 | 45 | ECAP70.JA-82 |
| ATBIG10105035049 | 100 | 50 | 4 | 0,8 | 0,66 | 35 | 49 | 0,8 | 45 | ECAP70.JA-100 |

VALUES AND SIZES

- ▶ 3,30 μ F (\emptyset 11mm - L: 30mm) (Product Index: 001-1010)
- ▶ 3,60 μ F (\emptyset 11mm - L: 30mm) (Product Index: 001-1011)
- ▶ 3,90 μ F (\emptyset 11mm - L: 30mm) (Product Index: 001-1012)
- ▶ 4,70 μ F (\emptyset 13mm - L: 30mm) (Product Index: 001-1015)
- ▶ 6,80 μ F (\emptyset 15mm - L: 30mm) (Product Index: 001-1019)
- ▶ 8,20 μ F (\emptyset 14mm - L: 39mm) (Product Index: 001-1021)
- ▶ 10,00 μ F (\emptyset 14mm - L: 39mm) (Product Index: 001-1023)
- ▶ 12,00 μ F (\emptyset 16mm - L: 39mm) (Product Index: 001-1025)
- ▶ 15,00 μ F (\emptyset 18mm - L: 39mm) (Product Index: 001-1027)
- ▶ 22,00 μ F (\emptyset 26mm - L: 38mm) (Product Index: 001-1030)
- ▶ 33,00 μ F (\emptyset 26mm - L: 38mm) (Product Index: 001-1033)
- ▶ 47,00 μ F (\emptyset 26mm - L: 51mm) (Product Index: 001-1036)
- ▶ 56,00 μ F (\emptyset 26mm - L: 51mm) (Product Index: 001-1038)
- ▶ 68,00 μ F (\emptyset 31mm - L: 51mm) (Product Index: 001-1040)
- ▶ 82,00 μ F (\emptyset 31mm - L: 51mm) (Product Index: 001-1042)
- ▶ 100,00 μ F (\emptyset 31mm - L: 51mm) (Product Index: 001-1044)