

# 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 $\mu$ 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)

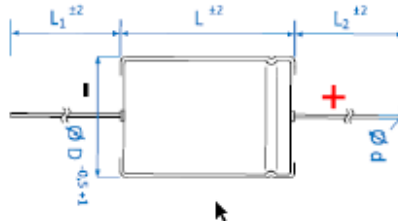
- Capacitor foil: Aluminum electrolytic / metal oxide layer
- Primary and secondary aluminum foils that offers AC voltage resistance, which make them highly suitable for audio application.
- Voltage rating: 70 VDC / 50 VAC
- Capacitance tolerance: +/- 5% (on nominal value)
- Temperature range: - 40C 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. ( $C_R$ ) [ $\mu\text{F}$ ]	Rated Volt. ( $U_R$ ) [V]	Tan $\delta$ typ. [%]	ESR typ. [ $\Omega$ ]	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 $\mu$ F ( $\emptyset$  11mm - L: 31mm) (Product Index: 001-1010)
- ▶ 22,00 $\mu$ F ( $\emptyset$  26mm - L: 38mm) (Product Index: 001-1030)
- ▶ 33,00 $\mu$ F ( $\emptyset$  26mm - L: 38mm) (Product Index: 001-1033)
- ▶ 47,00 $\mu$ F ( $\emptyset$  26mm - L: 51mm) (Product Index: 001-1036)
- ▶ 56,00 $\mu$ F ( $\emptyset$  26mm - L: 51mm) (Product Index: 001-1038)
- ▶ 68,00 $\mu$ F ( $\emptyset$  31mm - L: 51mm) (Product Index: 001-1040)
- ▶ 82,00 $\mu$ F ( $\emptyset$  31mm - L: 51mm) (Product Index: 001-1042)
- ▶ 100,00 $\mu$ F ( $\emptyset$  31mm - L: 51mm) (Product Index: 001-1044)