MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

NXB Series

• 105℃ 2,000~5,000Hrs assured.

- Non-solvent proof.
- Very low impedance
- For SMPS, IP-Board, Adaptor, Noies Filiter, Charger
- RoHS compliant.
- Halogen-free capacitors are also available.

NXA → NXB
Low Imp

SPECIFICATIONS

Item	Characteristics
Rated Voltage Range	6.3 ~ 100 VDC
Operating Temperature Range	-40 ~ +105℃
Capacitance Tolerance	±20%(M) (at 20℃, 120Hz)
Leakage Current	I=0.01CV(μA) or 3μA, whichever is greater. Where, I:Max. Leakage current(μA), C:Nominal capacitance(μF), V:Rated voltage(VDC) (at 20℃, 2 minutes)
Dissipation Factor Tanδ	See table below
Temperature Characteristics (Max. Impedance ratio)	See table below
Load Life	See table below
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20℃ after exposing them for 1,000 hours at 105℃ without voltage applied. The rated voltage shall be applied to the capacitors for a minimum of 30 minutes, at least 24 hours and not more than 48 hours before the measurements. Capacitance change ≦ ±25% of the initial value Tanδ ≦ 200% of the initial specified value Leakage current ≦ The initial specified value
Others	Satisfied characteristics KS C IEC 60384-4

Dissipation Factor Tanδ

Rated voltage(VDC)	6.3	10	16	25	35	50	63	100
Tanδ(Max)	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.08

When the capacitance exceeds 1000μF, 0.02 shall be added every 1000μF increase. (at 20℃, 120Hz)

Temperature Characteristics (Max. Impedance ratio)

Z(-25℃)/Z(20℃)	2
Z(-40℃)/Z(20℃)	3

(at 120Hz)

Load Life

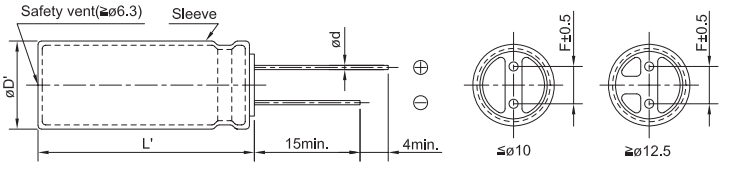
The following specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage is applied at 105℃ for the specified period of time.

Capacitance change ≦ ±25% of the initial value
Tanδ ≦ 200% of the initial specified value
Leakage current ≦ The initial specified value

Case Size(øD)	Life Time
ø5, 6.3	2,000 hours
ø8	3,000 hours
ø10	4,000 hours
ø12.5 ~	5,000 hours

DIMENSIONS OF NXB Series

Unit (mm)



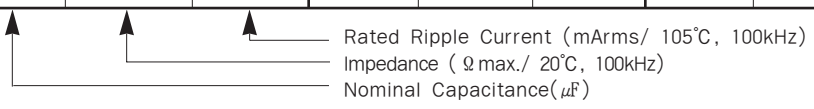
Marking : DARK BROWN SLEEVE, SILVER INK

øD	5	6.3	8	10	12.5	16	18
ød	0.5	0.5	0.6	0.6	0.6	0.8	0.8
F	2.0	2.5	3.5	5.0	5.0	7.5	7.5
øD'	øD+0.5 max.						
L'	L+1.5 max.			L+2.0 max.			

RATINGS OF NXB Series

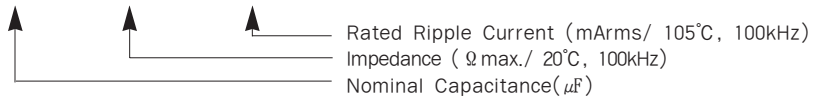
WVDC / ØD×L(mm)	6.3			10			16		
	μF	IMP.	Ripple	μF	IMP.	Ripple	μF	IMP.	Ripple
5×11	220	0.30	250	150	0.30	250	100	0.30	250
6.3×11	470	0.13	405	330	0.13	405	220	0.13	405
6.3×15	560	0.10	646	470	0.10	646	330	0.10	646
8×11.5	820	0.072	760	680	0.072	760	470	0.072	760
8×15	1,200	0.060	818	1,000	0.060	818	680	0.060	818
8×20	1,500	0.050	1,260	1,200	0.050	1,260	1,000	0.050	1,260
10×12.5	1,200	0.053	1,030	820	0.053	1,030	680	0.053	1,030
10×16	1,800	0.038	1,430	1,000	0.038	1,430	1,000	0.038	1,430
10×20	2,200	0.023	1,820	1,500	0.023	1,820	1,500	0.023	1,820
10×25	3,300	0.022	2,150	2,200	0.022	2,150	1,800	0.022	2,150
12.5×16	1,800	0.031	1,452	1,500	0.031	1,452	1,000	0.031	1,452
12.5×20	3,900	0.021	2,360	3,300	0.021	2,360	2,200	0.021	2,360
12.5×25	4,700	0.020	2,770	3,900	0.020	2,770	2,700	0.020	2,770
12.5×30	5,600	0.018	3,290	4,700	0.018	3,290	3,300	0.018	3,290
12.5×35	6,800	0.017	3,400	5,600	0.017	3,400	3,900	0.017	3,400
16×15	2,700	0.040	1,375	1,800	0.040	1,375	1,200	0.040	1,375
16×20	5,600	0.021	3,140	4,700	0.021	3,140	3,300	0.021	3,140
16×25	6,800	0.019	3,460	5,600	0.019	3,460	4,700	0.019	3,460
16×31.5	8,200	0.013	3,680	6,800	0.013	3,680	5,600	0.013	3,680
18×15	3,300	0.043	1,279	2,200	0.043	1,279	1,800	0.043	1,279
18×20	5,600	0.023	2,826	4,700	0.023	2,826	3,300	0.023	2,826
18×25	8,200	0.018	3,611	5,600	0.018	3,611	3,900	0.018	3,611

WVDC / ØD×L(mm)	25			35			50		
	μF	IMP.	Ripple	μF	IMP.	Ripple	μF	IMP.	Ripple
5×11	68	0.30	250	47	0.30	250	27	0.30	250
6.3×11	150	0.13	405	100	0.13	405	56	0.14	385
6.3×15	220	0.10	646	150	0.10	646	100	0.10	646
8×11.5	220	0.072	760	150	0.072	760	100	0.072	724
8×15	390	0.060	818	270	0.060	818	120	0.060	818
8×20	560	0.050	1,260	390	0.050	1,260	180	0.050	1,260
10×12.5	470	0.053	1,030	330	0.053	1,030	150	0.061	979
10×16	680	0.038	1,430	470	0.038	1,430	220	0.042	1,370
10×20	820	0.023	1,820	560	0.023	1,820	330	0.030	1,580
10×25	1,000	0.022	2,150	680	0.022	2,150	470	0.028	1,870
12.5×16	680	0.031	1,452	470	0.031	1,452	270	0.042	1,071
12.5×20	1,500	0.021	2,360	1,000	0.021	2,360	470	0.027	2,050
12.5×25	1,800	0.020	2,770	1,200	0.020	2,770	560	0.023	2,410
12.5×30	2,200	0.018	3,290	1,500	0.018	3,290	680	0.021	2,860
12.5×35	2,700	0.017	3,400	1,800	0.017	3,400	820	0.019	2,960
16×15	820	0.040	1,375	560	0.040	1,375	390	0.046	1,196
16×20	2,200	0.021	3,140	1,500	0.021	3,140	820	0.023	2,730
16×25	3,300	0.019	3,460	1,800	0.019	3,460	1,000	0.021	3,010
16×31.5	3,300	0.013	3,680	2,200	0.013	3,680	1,500	0.014	3,201
18×15	1,200	0.043	1,279	680	0.043	1,279	470	0.049	1,122
18×20	2,200	0.020	3,250	1,500	0.020	3,250	1,000	0.022	2,850
18×25	2,700	0.018	3,611	1,800	0.018	3,611	1,200	0.020	3,140



VDC / øD×L(mm)	63		
	μF	IMP.	Ripple
5×11	10	0.45	165
6.3×11	33	0.30	265
6.3×15	47	0.25	420
8×11.5	47	0.20	500
10×12.5	68	0.16	600
10×16	100	0.10	945
10×20	150	0.080	1,100
10×25	220	0.070	1,300
12.5×20	330	0.040	1,495
16×20	470	0.035	1,990
16×25	680	0.030	2,780
16×35.5	1,000	0.020	2,835

VDC / øD×L(mm)	100		
	μF	IMP.	Rilpple
5×11	3.3	2.0	125
5×11	4.7	2.0	125
6.3×11	10	0.50	205
6.3×15	22	0.40	300
8×11.5	22	0.30	355
10×12.5	33	0.25	450
10×16	47	0.20	580
12.5×20	100	0.10	1,045
12.5×25	150	0.070	1,195
16×25	220	0.060	1,600
16×31.5	330	0.040	1,750
18×40	470	0.030	2,060



RATED RIPPLE CURRENT MULTIPLIERS

Frequency Multipliers

Freq.(Hz) / Cap.(μF)	120	1k	10k	100k
3.3 ~ 180	0.40	0.75	0.90	1.0
220 ~ 560	0.50	0.85	0.94	1.0
680 ~ 1,800	0.60	0.87	0.95	1.0
2,200 ~ 3,900	0.75	0.90	0.95	1.0
4,700 ~ 18,000	0.85	0.95	0.98	1.0