

NXB Series

• 105°C 2,000~5,000Hrs assured.

- Non-solvent proof.
- Very Low Impedance.
- For SMPS, IP-Board, Adaptor, Noise Filter, Charger.
- RoHS compliant.
- Halogen-free capacitors are also available.

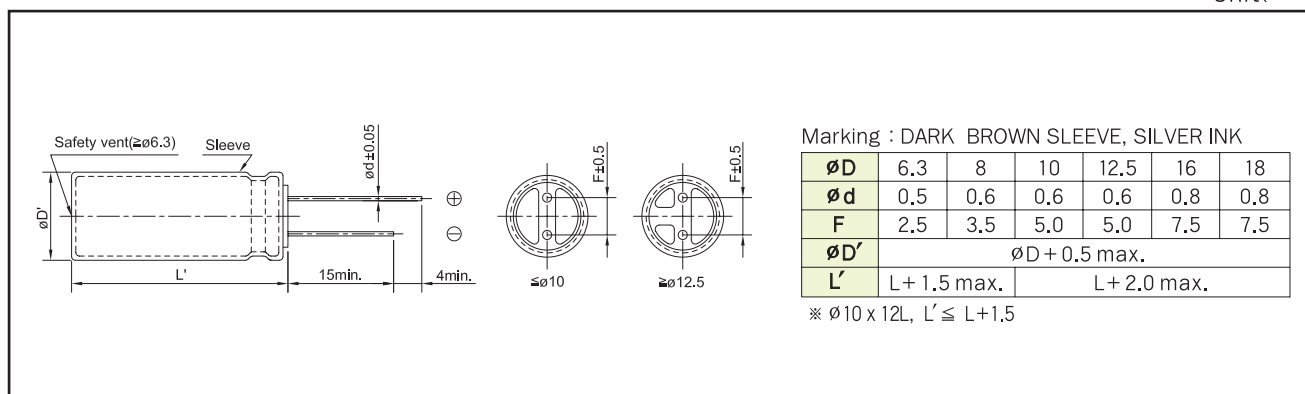


SPECIFICATIONS

Item	Characteristics																													
Rated Voltage Range	6.3 ~ 120 V _{DC}																													
Operating Temperature Range	-40 ~ +105°C																													
Capacitance Tolerance	±20%(M) (at 20°C, 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(V _{DC}) (at 20°C, 2 minutes)																													
Dissipation Factor(Tanδ)	<table><tr><td>Rated voltage(V_{DC})</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td><td>63</td><td>100</td><td>120</td></tr><tr><td>Tanδ(Max)</td><td>0.22</td><td>0.19</td><td>0.16</td><td>0.14</td><td>0.12</td><td>0.10</td><td>0.09</td><td>0.08</td><td>0.08</td></tr></table> When the capacitance exceeds 1,000μF, 0.02 shall be added every 1,000μF increase. (at 20°C, 120Hz)										Rated voltage(V _{DC})	6.3	10	16	25	35	50	63	100	120	Tanδ(Max)	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.08	0.08
Rated voltage(V _{DC})	6.3	10	16	25	35	50	63	100	120																					
Tanδ(Max)	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.08	0.08																					
Temperature Characteristics (Max. Impedance ratio)	<table><tr><td>Z(-25°C)/Z(20°C)</td><td>2</td></tr><tr><td>Z(-40°C)/Z(20°C)</td><td>3</td></tr></table> (at 120Hz)										Z(-25°C)/Z(20°C)	2	Z(-40°C)/Z(20°C)	3																
Z(-25°C)/Z(20°C)	2																													
Z(-40°C)/Z(20°C)	3																													
Load Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage with the rated ripple current is applied (the peak voltage shall not exceed the rated voltage) at 105°C for the specified period of time. <table><tr><td>Capacitance change</td><td>≤ ±25% of the initial value</td></tr><tr><td>Tanδ</td><td>≤ 200% of the initial specified value</td></tr><tr><td>Leakage current</td><td>≤ The initial specified value</td></tr></table> <table><tr><td>∅ D</td><td>Life Time</td></tr><tr><td>∅ 6.3</td><td>2,000 hours</td></tr><tr><td>∅ 8</td><td>3,000 hours</td></tr><tr><td>∅ 10</td><td>4,000 hours</td></tr><tr><td>∅ 12.5 ~</td><td>5,000 hours</td></tr></table>										Capacitance change	≤ ±25% of the initial value	Tanδ	≤ 200% of the initial specified value	Leakage current	≤ The initial specified value	∅ D	Life Time	∅ 6.3	2,000 hours	∅ 8	3,000 hours	∅ 10	4,000 hours	∅ 12.5 ~	5,000 hours				
Capacitance change	≤ ±25% of the initial value																													
Tanδ	≤ 200% of the initial specified value																													
Leakage current	≤ The initial specified value																													
∅ D	Life Time																													
∅ 6.3	2,000 hours																													
∅ 8	3,000 hours																													
∅ 10	4,000 hours																													
∅ 12.5 ~	5,000 hours																													
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours at 105°C 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. <table><tr><td>Capacitance change</td><td>≤ ±25% of the initial value</td></tr><tr><td>Tanδ</td><td>≤ 200% of the initial specified value</td></tr><tr><td>Leakage current</td><td>≤ The initial specified value</td></tr></table>										Capacitance change	≤ ±25% of the initial value	Tanδ	≤ 200% of the initial specified value	Leakage current	≤ The initial specified value														
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																													

DIMENSIONS OF NXB Series

Unit(mm)



RATINGS OF NXB Series

V _{DC} ØD×L(mm)	6.3				10				16			
	μF	IMP.		Ripple	μF	IMP.		Ripple	μF	IMP.		Ripple
		20°C	-10°C			20°C	-10°C			20°C	-10°C	
6.3×15	560	0.10	0.32	646	470	0.10	0.32	646	330	0.10	0.32	646
8×15	1,200	0.060	0.18	818	1,000	0.060	0.18	818	680	0.060	0.18	818
8×20	1,500	0.050	0.16	1,260	1,200	0.050	0.16	1,260	1,000	0.050	0.16	1,260
10×12	1,200	0.053	0.16	1,360	820	0.053	0.16	1,360	680	0.053	0.16	1,360
					1000	0.053	0.16	1,360				
10×12.5	1,200	0.053	0.16	1,360	820	0.053	0.16	1,360	680	0.053	0.16	1,360
					1000	0.053	0.16	1,360				
10×16	1,800	0.038	0.12	1,430	1,000	0.038	0.12	1,430	1,000	0.038	0.12	1,430
					1,500	0.038	0.12	1,430				
10×20	2,200	0.023	0.069	1,820	1,500	0.023	0.069	1,820	1,500	0.023	0.069	1,820
10×25	3,300	0.022	0.066	2,150	2,200	0.022	0.066	2,150	1,800	0.022	0.066	2,150
12.5×16	1,800	0.031	0.078	1,452	1,500	0.031	0.078	1,452	1,000	0.031	0.078	1,452
12.5×20	3,900	0.021	0.053	2,360	3,300	0.021	0.053	2,360	2,200	0.021	0.053	2,360
12.5×25	4,700	0.020	0.050	2,770	3,900	0.020	0.050	2,770	2,700	0.020	0.050	2,770
12.5×30	5,600	0.018	0.046	3,290	4,700	0.018	0.046	3,290	3,300	0.018	0.046	3,290
12.5×35	6,800	0.017	0.044	3,400	5,600	0.017	0.044	3,400	3,900	0.017	0.044	3,400
16×15	2,700	0.040	0.101	1,375	1,800	0.040	0.101	1,375	1,200	0.040	0.101	1,375
16×20	5,600	0.021	0.053	3,140	4,700	0.021	0.053	3,140	3,300	0.021	0.053	3,140
16×25	6,800	0.019	0.051	3,460	5,600	0.019	0.051	3,460	4,700	0.019	0.051	3,460
16×31.5	8,200	0.013	0.035	3,680	6,800	0.013	0.035	3,680	5,600	0.013	0.035	3,680
18×20	5,600	0.020	0.052	3,265	4,700	0.020	0.052	3,265	3,300	0.020	0.052	3,265
18×25	8,200	0.018	0.049	3,611	5,600	0.018	0.049	3,611	3,900	0.018	0.049	3,611

V _{DC} ØD×L(mm)	25				35				50			
	μF	IMP.		Ripple	μF	IMP.		Ripple	μF	IMP.		Ripple
		20°C	-10°C			20°C	-10°C			20°C	-10°C	
6.3×15	220	0.10	0.32	646	150	0.10	0.32	646	100	0.10	0.32	646
8×15	390	0.060	0.18	818	270	0.060	0.18	818	120	0.060	0.24	818
8×20	560	0.050	0.16	1,260	390	0.050	0.16	1,260	180	0.050	0.18	1,260
10×12	330	0.053	0.16	1,360	220	0.053	0.16	1,360	150	0.061	0.18	979
	470	0.053	0.16	1,360	330	0.053	0.16	1,360				
10×12.5	330	0.053	0.16	1,360	220	0.053	0.16	1,360	150	0.061	0.18	979
	470	0.053	0.16	1,360	330	0.053	0.16	1,360				
10×16	470	0.038	0.12	1,430	470	0.038	0.12	1,430	220	0.042	0.12	1,370
	680	0.038	0.12	1,430								
10×20	680	0.023	0.069	1,820	680	0.023	0.069	1,820	330	0.030	0.090	1,580
	820	0.023	0.069	2,000								
	1,000	0.025	0.075	1,900								
10×25	1,000	0.022	0.066	2,150	680	0.022	0.066	2,150	470	0.028	0.085	1,870
12.5×16	680	0.031	0.078	1,452	470	0.031	0.078	1,452	270	0.042	0.078	1,071
12.5×20	1,500	0.021	0.053	2,360	1,000	0.021	0.053	2,360	470	0.027	0.068	2,050
12.5×25	1,800	0.020	0.050	2,770	1,000	0.020	0.050	2,770	560	0.023	0.059	2,410
	2,200	0.020	0.050	3,000	1,200	0.020	0.050	2,770				
12.5×30	2,200	0.018	0.046	3,290	1,500	0.018	0.046	3,290	680	0.021	0.052	2,860
12.5×35	2,700	0.017	0.044	3,400	1,800	0.017	0.044	3,400	820	0.019	0.051	2,960
16×15	820	0.040	0.101	1,375	560	0.040	0.101	1,375	390	0.046	0.114	1,196
16×20	2,200	0.021	0.053	3,140	1,500	0.021	0.053	3,140	820	0.023	0.059	2,730
16×25	3,300	0.019	0.051	3,460	1,800	0.019	0.051	3,460	1,000	0.021	0.056	3,010
					2,200	0.019	0.051	3,460				
16×31.5	3,300	0.013	0.035	3,680	2,200	0.013	0.035	3,680	1,500	0.014	0.037	3,201
18×20	2,200	0.020	0.052	3,265	1,500	0.020	0.052	3,265	1,000	0.022	0.059	2,850
18×25	2,700	0.018	0.049	3,611	1,800	0.018	0.049	3,611	1,200	0.020	0.053	3,140

RATINGS OF NXB Series

V _{DC} ØD×L(mm)	63			
	μF	IMP.		Ripple
		20°C	-10°C	
6.3 × 15	47	0.25	1.0	420
10 × 12	68	0.16	0.64	600
10 × 12.5	68	0.16	0.64	600
10 × 16	100	0.10	0.40	945
10 × 20	150	0.080	0.32	1,100
10 × 25	220	0.070	0.28	1,300
12.5 × 20	330	0.040	0.16	1,495
16 × 20	470	0.035	0.14	1,990
16 × 25	680	0.030	0.12	2,780
16 × 31.5	1,000	0.020	0.080	2,835

V _{DC} ØD×L(mm)	100				120			
	μF	IMP.		Ripple	μF	IMP.		Ripple
		20°C	-10°C			20°C	-10°C	
6.3 × 15	22	0.40	1.6	300				
10 × 12	33	0.25	1.0	450	33	0.25	1.0	599
10 × 12.5	33	0.25	1.0	450	33	0.25	1.0	599
10 × 16	47	0.20	0.80	580	47	0.20	0.80	771
12.5 × 20	100	0.10	0.40	1,045	100	0.10	0.40	1,400
12.5 × 25	150	0.070	0.28	1,195	120	0.070	0.28	1,589
16 × 25	220	0.060	0.24	1,600	220	0.060	0.24	2,128
16 × 31.5	330	0.040	0.16	1,750	270	0.040	0.16	2,328
	470	0.040	0.16	1,750				
18 × 40	820	0.030	0.12	2,060	560	0.036	0.144	2,740

↑ Rated Ripple Current (mA_{rms}/105°C, 100kHz)
 ↑ Impedance (Ω max./100kHz)
 ↑ Nominal Capacitance(μF)

RIPPLE CURRENT MULTIPLIERS

Frequency Multipliers

Cap.(μF) \ Freq.(Hz)	120	1k	10k	50k	100k
22 ~ 180	0.40	0.75	0.90	0.95	1.00
220 ~ 560	0.50	0.85	0.94	0.96	1.00
680 ~ 1,800	0.60	0.87	0.95	0.97	1.00
2,200 ~ 3,900	0.75	0.90	0.95	0.97	1.00
4,700 ~ 8,200	0.85	0.95	0.98	0.99	1.00