NXH Series

• 105℃ 6,000~10,000Hrs assured.

- Non-solvent proof.
- Low Impedance.
- Long Life.
- For LED TV BLU Inverter, SMPS, IP-Board, Adaptor.
- **RoHS compliant.**
- **Halogen-free capacitors are also available.**

NXB → NXH
Long Life

SPECIFICATIONS

Item	Characteristics
Rated Voltage Range	6.3 ~ 100 V_{DC}
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(V_{DC}) (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	See table below
Others	Satisfied characteristics KS C IEC 60384-4

Dissipation Factor(Tanδ)

Rated voltage(V_{DC})	6.3	10	16	25	35	50	63	80	100
Tanδ(Max.)	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.08	0.08

When the capacitance exceeds 1,000μF, 0.02 shall be added every 1,000μF 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 with the rated ripple current is applied (the peak voltage shall not exceed the rated voltage) at 105℃ for the specified period of time.

Rated voltage(V_{DC})	6.3~10	16~100
Capacitance change	≦±30% of the initial value	≦±25% of the initial value
Tan δ	≦200% of the initial specified value	
Leakage current	≦The initial specified value	

ØD	Life Time
Ø5~ Ø6.3	6,000 hours
Ø8	8,000 hours
Ø10~	10,000 hours

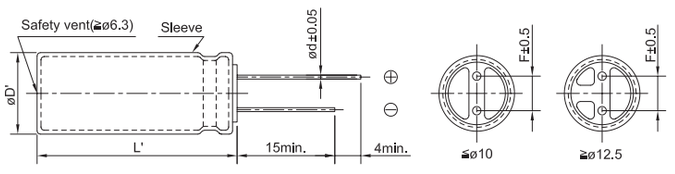
Shelf Life

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.

Rated voltage(V_{DC})	6.3~10	16~100
Capacitance change	≦±30% of the initial value	≦±25% of the initial value
Tan δ	≦200% of the initial specified value	
Leakage current	≦The initial specified value	

DIMENSIONS OF NXH Series

Unit(mm)



Marking : YELLOW SLEEVE, BLACK 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.			

※ Ø10 x 12L, L'≦ L+1.5

RATINGS OF NXH Series

VDC / ØDxL(mm)	6.3				10				16			
	μF	IMP.		Ripple	μF	IMP.		Ripple	μF	IMP.		Ripple
		20℃	-10℃			20℃	-10℃			20℃	-10℃	
5×15	470	0.13	0.47	480	330	0.13	0.47	480	220	0.13	0.47	480
6.3×15	560	0.084	0.31	620	470	0.084	0.31	620	330	0.084	0.31	620
8×15	1,200	0.045	0.15	1,250	1,000	0.045	0.15	1,250	680	0.045	0.15	1,250
8×20	1,500	0.029	0.11	1,500	1,500	0.029	0.11	1,500	1,000	0.029	0.11	1,500
10×12	1,200	0.039	0.14	1,330	1,000	0.039	0.14	1,330	680	0.039	0.14	1,330
10×12.5	1,200	0.039	0.14	1,330	1,000	0.039	0.14	1,330	680	0.039	0.14	1,330
10×16	1,800	0.028	0.10	1,760	1,500	0.028	0.10	1,760	1,000	0.028	0.10	1,760
10×20	2,200	0.020	0.060	1,960	1,800	0.020	0.060	1,960	1,500	0.020	0.060	1,960
10×25	2,700	0.018	0.054	2,250	2,200	0.018	0.054	2,250	1,800	0.018	0.054	2,250
10×33	3,300	0.015	0.045	2,550	2,700	0.015	0.045	2,550	2,200	0.015	0.045	2,550
12.5×20	3,900	0.017	0.043	2,480	3,300	0.017	0.043	2,480	2,200	0.017	0.043	2,480
12.5×25	4,700	0.015	0.038	2,900	3,900	0.015	0.038	2,900	2,700	0.015	0.038	2,900
12.5×30	5,600	0.013	0.033	3,450	4,700	0.013	0.033	3,450	3,300	0.013	0.033	3,450
12.5×35	6,800	0.012	0.031	3,570	5,600	0.012	0.031	3,570	3,900	0.012	0.031	3,570
16×20	6,800	0.015	0.038	3,250	4,700	0.015	0.038	3,250	3,300	0.015	0.038	3,250
16×25	8,200	0.013	0.035	3,630	6,800	0.013	0.035	3,630	4,700	0.013	0.035	3,630
18×25	10,000	0.012	0.031	3,650	8,200	0.012	0.031	3,650	5,600	0.012	0.031	3,650

VDC / ØDxL(mm)	25				35				50			
	μF	IMP.		Ripple	μF	IMP.		Ripple	μF	IMP.		Ripple
		20℃	-10℃			20℃	-10℃			20℃	-10℃	
5×15	150	0.13	0.47	480	100	0.13	0.47	480	56	0.16	0.56	350
6.3×15	220	0.084	0.31	620	150	0.084	0.31	620	100	0.12	0.43	586
8×15	390	0.045	0.15	1,250	270	0.045	0.15	1,250	120	0.061	0.18	950
	470	0.045	0.15	1,330								
8×20	560	0.029	0.11	1,500	390	0.029	0.11	1,500	180	0.046	0.14	1,190
					470	0.029		1,600				
10×12	470	0.039	0.14	1,330	330	0.039	0.14	1,330	68	0.070	0.21	750
									150	0.061	0.18	979
10×12.5	470	0.039	0.14	1,330	330	0.039	0.14	1,330	68	0.070	0.21	750
									150	0.061	0.18	979
10×16	680	0.028	0.10	1,760	470	0.028	0.10	1,760	220	0.042	0.12	1,370
10×20	820	0.020	0.060	1,960	560	0.020	0.060	1,850	270	0.030	0.090	1,580
	1,000	0.020	0.060	1,960	680	0.025	0.075	1,960				
10×25	1,000	0.018	0.054	2,250	680	0.018	0.054	2,250	330	0.028	0.085	1,870
10×33	1,200	0.015	0.045	2,550	1,000	0.015	0.045	2,550	470	0.025	0.076	2,110
12.5×20	1,000	0.018	0.045	2,500	1,000	0.017	0.043	2,480	470	0.027	0.068	2,050
	1,500	0.017	0.043	2,550								
12.5×25	1,800	0.015	0.038	2,900	1,200	0.015	0.038	2,900	560	0.023	0.059	2,410
12.5×30	2,200	0.013	0.033	3,450	1,500	0.013	0.033	3,450	680	0.021	0.052	2,860
12.5×35	2,700	0.012	0.031	3,570	1,800	0.012	0.031	3,570	820	0.019	0.051	2,960
16×20	2,200	0.015	0.038	3,250	1,500	0.015	0.038	3,250	820	0.023	0.059	2,730
	2,700	0.015	0.038	3,250					1,000	0.023	0.059	2,730
16×25	3,300	0.013	0.035	3,630	2,200	0.013	0.035	3,630	1,000	0.021	0.056	3,010
18×25	3,900	0.012	0.031	3,650	2,700	0.012	0.031	3,650	1,500	0.019	0.051	3,290

RATINGS OF NXH Series

VDC / ØD×L(mm)	63			
	μF	IMP.		Ripple
		20℃	-10℃	
8×15	100	0.18	0.72	688
8×20	150	0.16	0.64	861
10×12	120	0.16	0.64	725
10×12.5	120	0.16	0.64	725
10×16	180	0.10	0.40	998
10×20	270	0.080	0.32	1,200
10×25	330	0.070	0.28	1,410
12.5×20	390	0.050	0.20	1,570
12.5×25	470	0.037	0.15	1,990
12.5×30	560	0.032	0.13	2,410
12.5×35	680	0.030	0.12	2,620
16×20	560	0.035	0.14	2,100
16×25	820	0.030	0.12	2,430

VDC / ØD×L(mm)	80				100			
	μF	IMP.		Ripple	μF	IMP.		Ripple
		20℃	-10℃			20℃	-10℃	
8×15	68	0.20	0.90	585	47	0.20	0.90	585
8×20	100	0.16	0.72	735	68	0.16	0.72	735
10×12	82	0.17	0.68	624	47	0.17	0.68	624
10×12.5	82	0.17	0.68	624	47	0.17	0.68	624
10×16	120	0.11	0.44	780	68	0.11	0.44	780
10×20	180	0.084	0.35	1,040	100	0.084	0.35	1,040
10×25	220	0.069	0.28	1,170	120	0.069	0.28	1,170
12.5×16	180	0.11	0.33	975	100	0.11	0.33	975
12.5×20	270	0.062	0.19	1,430	150	0.062	0.19	1,430
12.5×25	330	0.047	0.15	1,620	220	0.047	0.15	1,620
12.5×30	390	0.042	0.14	1,950	270	0.042	0.14	1,950
12.5×35	470	0.036	0.11	2,140	330	0.036	0.11	2,140
12.5×40	560	0.032	0.096	2,340	390	0.032	0.096	2340
16×20	390	0.048	0.16	1,750	270	0.048	0.16	1,750
16×25	560	0.038	0.11	2,210	390	0.038	0.11	2,210
16×31.5	680	0.032	0.096	2,400	470	0.032	0.096	2,400
16×35.5	820	0.029	0.087	2,600	560	0.029	0.087	2,600
16×40	1,000	0.027	0.081	2,860	680	0.027	0.081	2,860
18×20	560	0.045	0.14	1,950	390	0.045	0.14	1,950
18×25	820	0.036	0.11	2,270	470	0.036	0.11	2,270
18×31.5	1,000	0.030	0.090	2,470	560	0.030	0.090	2,470
18×35.5	1,200	0.027	0.081	2,860	680	0.027	0.081	2,860
18×40	1,500	0.026	0.078	3,510	820	0.026	0.078	3,510

RIPPLE CURRENT MULTIPLIERS

Frequency Multipliers

Cap.(μF) \ Freq.(Hz)	120	1k	10k	50k	100k
47 ~ 270	0.50	0.73	0.92	0.95	1.00
330 ~ 680	0.55	0.77	0.94	0.96	1.00
820 ~ 1,800	0.60	0.80	0.96	0.97	1.00
2,200 ~ 10,000	0.70	0.85	0.98	0.99	1.00