NXQ Series

• 105℃ 6,000 ~ 10,000Hrs assured.

- Non-solvent proof.
- Low impedance, High ripple
- For LCD, LED TV BLU Inverter, SMPS, IP-Board, Adaptor
- RoHS compliant.
- Halogen-free capacitors are also available.

NXH → NXQ

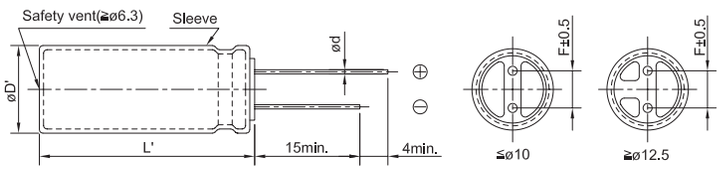
High Ripple

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℃, 2minutes)
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 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 Tanδ: ≦ 200% of the initial specified value Leakage current: ≦ The initial specified value ØD: Life Time (6.3V_{DC} / 10~50V_{DC} / 63~100V_{DC}) Ø5~Ø6.3: 6,000hours / 7,000hours / 6,000hours Ø8 X 11.5L: 8,000hours / 9,000hours / 8,000hours Ø8 X 15L~20L: 9,000hours / 10,000hours / 9,000hours Ø10 X 12.5L: 9,000hours Ø10 X 16L~25L Ø12.5~: 10,000hours
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20℃ after exposing them for 500 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 Tanδ: ≦ 200% of the initial specified value Leakage current: ≦ The initial specified value
Others	Satisfied characteristics W of KS C 6421

DIMENSIONS OF NXQ Series

Unit(mm)



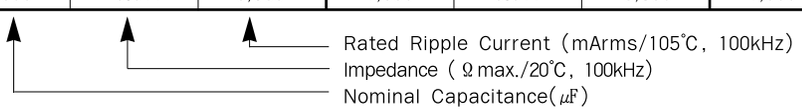
Marking : DARK BROWN SLEEVE, SILVER INK

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 NXQ Series

WVDC / ØD×L(mm)	6.3			10			16		
	μF	IMP.	Ripple	μF	IMP.	Ripple	μF	IMP.	Ripple
5×11	220	0.40	345	150	0.40	450	120	0.40	450
6.3×11	470	0.17	540	330	0.17	700	270	0.17	700
8×11.5	820	0.075	945	560	0.075	1,200	470	0.075	1,200
8×15	1,000	0.059	1,250	680	0.059	1,600	560	0.059	1,600
8×20	1,500	0.041	1,500	1,000	0.041	1,960	820	0.041	1,960
10×12.5	1,200	0.053	1,500	820	0.053	1,700	680	0.053	1,700
10×16	1,800	0.038	1,760	1,200	0.038	2,000	1,000	0.038	2,000
10×20	2,700	0.028	1,960	1,800	0.028	2,500	1,500	0.028	2,500
10×25	3,300	0.024	2,250	2,200	0.024	2,900	1,800	0.024	2,900
12.5×20	3,900	0.025	2,480	2,700	0.025	2,600	2,200	0.025	2,600
12.5×25	4,700	0.019	2,900	3,300	0.019	3,050	2,700	0.019	3,050
12.5×30	5,600	0.018	3,450	4,700	0.018	3,500	3,300	0.018	3,500
12.5×35	6,800	0.016	3,570	5,600	0.016	3,600	3,900	0.016	3,600
16×20	6,800	0.021	3,250	4,700	0.021	3,250	3,300	0.021	3,250
16×25	8,200	0.017	3,630	5,600	0.017	3,630	4,700	0.017	3,630

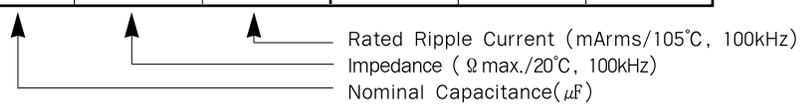
WVDC / ØD×L(mm)	25			35			50		
	μF	IMP.	Ripple	μF	IMP.	Ripple	μF	IMP.	Ripple
5×11	68	0.40	450	47	0.40	450	27	0.48	310
6.3×11	150	0.17	700	100	0.17	700	56	0.22	500
8×11.5	330	0.075	1,200	180	0.075	1,200	100	0.120	950
8×15	390	0.059	1,600	220	0.059	1,600	120	0.082	1,230
8×20	560	0.041	1,960	330	0.041	1,960	180	0.058	1,580
10×12.5	470	0.053	1,700	270	0.053	1,700	150	0.073	1,280
10×16	680	0.038	2,000	390	0.038	2,000	220	0.053	1,650
10×20	1,000	0.028	2,500	560	0.028	2,500	330	0.038	2,060
10×25	1,200	0.024	2,900	680	0.024	2,900	390	0.032	2,240
12.5×20	1,500	0.025	2,600	820	0.025	2,600	470	0.032	2,200
12.5×25	1,800	0.019	3,050	1,200	0.019	3,050	680	0.025	2,500
12.5×30	2,200	0.018	3,500	1,500	0.018	3,500	820	0.023	3,100
12.5×35	2,700	0.016	3,600	1,800	0.016	3,600	1,000	0.021	3,250
16×20	2,200	0.021	3,250	1,500	0.021	3,250	820	0.026	2,730
16×25	3,300	0.017	3,630	1,800	0.017	3,630	1,000	0.022	3,010



RATINGS OF NXQ Series

WVDC / ØD×L(mm)	63		
	μF	IMP.	Ripple
5×11	18	0.71	240
6.3×11	47	0.28	420
8×11.5	82	0.18	720
8×15	100	0.13	990
8×20	150	0.096	1,200
10×12.5	120	0.110	990
10×16	180	0.076	1,200
10×20	270	0.056	1,570
10×25	330	0.046	1,990
12.5×20	390	0.041	1,990
12.5×25	470	0.031	2,460
12.5×30	560	0.028	2,760
12.5×35	680	0.024	3,040
16×20	560	0.032	2,150
16×25	820	0.025	2,550

WVDC / ØD×L(mm)	80			100		
	μF	IMP.	Ripple	μF	IMP.	Ripple
5×11	12	1.2	220	8.2	1.2	220
6.3×11	27	0.46	370	18	0.46	370
8×11.5	47	0.29	620	33	0.29	620
8×15	56	0.20	780	47	0.20	780
8×20	82	0.16	1,040	68	0.16	1,040
10×12.5	68	0.17	780	47	0.17	780
10×16	100	0.11	1,040	68	0.11	1,040
10×20	150	0.084	1,430	100	0.084	1,430
10×25	180	0.069	1,620	120	0.069	1,620
12.5×16	150	0.110	1,430	100	0.11	1,430
12.5×20	220	0.062	1,750	150	0.062	1,750
12.5×25	270	0.047	2,210	220	0.047	2,210
12.5×30	330	0.042	2,400	270	0.042	2,400
12.5×35	390	0.036	2,600	330	0.036	2,600
12.5×40	470	0.032	2,860	390	0.032	2,860
16×20	330	0.048	1,950	270	0.048	1,950
16×25	470	0.038	2,430	390	0.038	2,430
16×31.5	560	0.032	2,640	470	0.032	2,640
16×35.5	680	0.029	2,860	560	0.029	2,860
16×40	820	0.027	3,510	680	0.027	3,510
18×20	470	0.045	2,270	390	0.045	2,270
18×25	680	0.036	2,500	470	0.036	2,500
18×31.5	820	0.030	2,860	560	0.030	2,860
18×35.5	1,000	0.027	3,510	680	0.027	3,510
18×40	1,200	0.026	3,860	820	0.026	3,860



RATED RIPPLE CURRENT MULTIPLIERS

Frequency Multipliers

Freq.(Hz) / Cap.(μF)	120	1k	10k	50k	100k
8.2 ~ 33	0.42	0.70	0.90	0.93	1.00
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 ~ 8,200	0.70	0.85	0.98	0.99	1.00