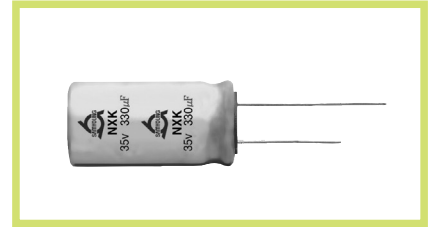
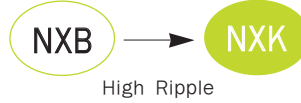


## NXK Series

- 105°C 4,000~5,000Hrs assured.

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



### SPECIFICATIONS

Item	Characteristics																			
Rated Voltage Range	10 ~ 50 V <sub>DC</sub>																			
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 <sub>DC</sub> ) (at 20°C, 2 minutes)																			
Dissipation Factor(Tanδ)	<table border="1"> <tr> <td>Rated Voltage(V<sub>DC</sub>)</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> </tr> <tr> <td>Tanδ(Max.)</td> <td>0.19</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> </tr> </table> <p>When the capacitance exceeds 1,000μF, 0.02 shall be added every 1,000μF increase. (at 20°C, 120Hz)</p>	Rated Voltage(V <sub>DC</sub> )	10	16	25	35	50	Tanδ(Max.)	0.19	0.16	0.14	0.12	0.10							
Rated Voltage(V <sub>DC</sub> )	10	16	25	35	50															
Tanδ(Max.)	0.19	0.16	0.14	0.12	0.10															
Temperature Characteristics (Max. Impedance ratio)	<table border="1"> <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> <p>(at 120Hz)</p>	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	<p>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.</p> <table border="1"> <tr> <td>Rated voltage(V<sub>DC</sub>)</td> <td>10</td> <td>16~50</td> <td>Case Size(∅D)</td> <td>Life Time</td> </tr> <tr> <td>Capacitance change</td> <td>≤ ±30% of the initial value</td> <td>≤ ±25% of the initial value</td> <td>∅ 8</td> <td rowspan="3">4,000Hrs</td> </tr> <tr> <td>Tanδ</td> <td colspan="2">≤ 200% of the initial specified value</td> <td>∅ 10x12 ~ 12.5L</td> </tr> <tr> <td>Leakage current</td> <td colspan="2">≤ The initial specified value</td> <td>∅ 10</td> <td>5,000Hrs</td> </tr> </table>	Rated voltage(V <sub>DC</sub> )	10	16~50	Case Size(∅D)	Life Time	Capacitance change	≤ ±30% of the initial value	≤ ±25% of the initial value	∅ 8	4,000Hrs	Tanδ	≤ 200% of the initial specified value		∅ 10x12 ~ 12.5L	Leakage current	≤ The initial specified value		∅ 10	5,000Hrs
Rated voltage(V <sub>DC</sub> )	10	16~50	Case Size(∅D)	Life Time																
Capacitance change	≤ ±30% of the initial value	≤ ±25% of the initial value	∅ 8	4,000Hrs																
Tanδ	≤ 200% of the initial specified value		∅ 10x12 ~ 12.5L																	
Leakage current	≤ The initial specified value		∅ 10		5,000Hrs															
Shelf Life	<p>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.</p> <table border="1"> <tr> <td>Rated voltage(V<sub>DC</sub>)</td> <td>10</td> <td>16~50</td> </tr> <tr> <td>Capacitance change</td> <td>≤ ±30% of the initial value</td> <td>≤ ±25% of the initial value</td> </tr> <tr> <td>Tanδ</td> <td colspan="2">±200% of the initial specified value</td> </tr> <tr> <td>Leakage current</td> <td colspan="2">≤ The initial specified value</td> </tr> </table>	Rated voltage(V <sub>DC</sub> )	10	16~50	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								
Rated voltage(V <sub>DC</sub> )	10	16~50																		
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 KS C IEC 60384-4																			

### DIMENSIONS OF NXK Series

Unit(mm)

Marking : YELLOW SLEEVE, BLACK INK

∅D	8	10
∅d	0.6	0.6
F	3.5	5.0
∅D'	∅D + 0.5 max.	
L'	L + 1.5 max. L + 2.0 max.	

※ ∅10 x 12L, L' ≤ L + 1.5

**RATINGS OF NXK series**

Vdc				
10				
Capacitance (μF)	ø D × L (mm)	Rated Ripple Current (mArms/105°C, 100kHz)	IMP.	
			( ρ max./20°C, 100kHz)	( ρ max./-10°C, 100kHz)
680	8 × 11.5	1,417	0.073	0.29
1,000	8 × 15	2,050	0.059	0.24
1,000	10 × 12	2,190	0.053	0.21
1,000	10 × 12.5	2,190	0.053	0.21
1,500	8 × 20	2,380	0.041	0.16
1,500	10 × 16	2,550	0.038	0.15
1,800	10 × 20	2,880	0.028	0.112
2,200	10 × 25	3,160	0.024	0.096
2,700	10 × 33	3,570	0.020	0.080

Vdc				
16				
Capacitance (μF)	ø D × L (mm)	Rated Ripple Current (mArms/105°C, 100kHz)	IMP.	
			( ρ max./20°C, 100kHz)	( ρ max./-10°C, 100kHz)
470	8 × 11.5	1,417	0.073	0.29
680	8 × 15	2,050	0.059	0.24
680	10 × 12	2,190	0.053	0.21
680	10 × 12.5	2,190	0.053	0.21
1,000	8 × 20	2,380	0.041	0.16
1,000	10 × 16	2,550	0.038	0.15
1,500	10 × 20	2,880	0.028	0.112
1,800	10 × 25	3,160	0.024	0.096
2,200	10 × 33	3,570	0.020	0.080

Vdc				
25				
Capacitance (μF)	ø D × L (mm)	Rated Ripple Current (mArms/105°C, 100kHz)	IMP.	
			( ρ max./20°C, 100kHz)	( ρ max./-10°C, 100kHz)
330	8 × 11.5	1,417	0.073	0.29
390	8 × 15	2,050	0.059	0.24
470	10 × 12	2,190	0.053	0.21
470	10 × 12.5	2,190	0.053	0.21
560	8 × 20	2,380	0.041	0.16
680	10 × 16	2,550	0.038	0.15
820	10 × 20	2,880	0.028	0.112
1,000	10 × 25	3,160	0.024	0.096
1,200	10 × 33	3,570	0.020	0.080

Vdc				
35				
Capacitance (μF)	ø D × L (mm)	Rated Ripple Current (mArms/105°C, 100kHz)	IMP.	
			( ρ max./20°C, 100kHz)	( ρ max./-10°C, 100kHz)
220	8 × 11.5	1,417	0.073	0.29
270	8 × 15	2,050	0.059	0.24
330	10 × 12	2,190	0.053	0.21
330	10 × 12.5	2,190	0.053	0.21
390	8 × 20	2,380	0.041	0.16
470	10 × 16	2,550	0.038	0.15
560	10 × 20	2,880	0.028	0.112
680	10 × 25	3,160	0.024	0.096
1,000	10 × 33	3,570	0.020	0.080

Vdc				
50				
Capacitance (μF)	ø D × L (mm)	Rated Ripple Current (mArms/105°C, 100kHz)	IMP.	
			( ρ max./20°C, 100kHz)	( ρ max./-10°C, 100kHz)
100	8 × 11.5	1,086	0.096	0.38
120	8 × 15	1,558	0.080	0.32
150	10 × 12	1,612	0.083	0.33
150	10 × 12.5	1,612	0.083	0.33
180	8 × 20	1,888	0.065	0.26
220	10 × 16	1,985	0.057	0.23
270	10 × 20	2,322	0.042	0.17
330	10 × 25	2,626	0.037	0.15
470	10 × 33	2,954	0.033	0.13

**RIPPLE CURRENT MULTIPLIERS**

Frequency Multipliers

Cap.(μF) \ Freq.(Hz)	120	1k	10k	50k	100k
100 ~ 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 ~ 2,700	0.70	0.85	0.98	0.99	1.00