

## NXE Series

• 105°C 3,000~4,000Hrs assured

- Non-solvent proof.
- Ultra low impedance/ESR, Long Life.
- For MAIN-Board, SMPS
- RoHS compliant.
- Halogen-free capacitors are also available.



### SPECIFICATIONS

Item	Characteristics												
Rated Voltage Range	6.3 ~ 35 V <sub>DC</sub>												
Operating Temperature Range	-40 ~ + 105°C												
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)												
Leakage Current	I = 0.03CV(µA) or 4µA, 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>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</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> </tr> </table> (at 20°C, 120Hz)	Rated Voltage(V <sub>DC</sub> )	6.3	10	16	25	35	Tanδ(Max.)	0.22	0.19	0.16	0.14	0.12
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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> (at 120Hz)	Z(-25°C) / Z(20°C)	2	Z(-40°C) / Z(20°C)	3								
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Load Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied at 105°C for the specified period of time. <table border="1"> <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 border="1"> <tr> <td>∅D</td> <td>Life Time</td> </tr> <tr> <td>∅8</td> <td>3,000 hours</td> </tr> <tr> <td>∅10</td> <td>4,000 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	∅8	3,000 hours	∅10	4,000 hours
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∅D	Life Time												
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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 border="1"> <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>≤ 200% of the initial specified value</td> </tr> </table>	Capacitance change	≤ ±25% of the initial value	Tanδ	≤ 200% of the initial specified value	Leakage current	≤ 200% of the initial specified value						
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Others	Satisfied characteristics KS C IEC 60384-4												

### DIMENSIONS OF NXE Series

Unit (mm)

Marking : DARK BROWN SLEEVE, SILVER 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.



# MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

## RATING OF NXE series

V <sub>dc</sub>		6.3		
Capacitance (μF)	∅ D×L(mm)	Rated Ripple Current (mA <sub>rms</sub> /105°C, 100kHz)	ESR (mΩ max./20°C, 100kHz)	
820	8×11.5	1,140	36	
1,200	8×15	1,490	28	
1,500	10×12.5	1,540	26	
1,800	8×20	1,870	19	
1,800	10×16	2,000	19	
2,200	10×20	2,550	13	
3,300	10×25	2,800	12	

V <sub>dc</sub>		10		
Capacitance (μF)	∅ D×L(mm)	Rated Ripple Current (mA <sub>rms</sub> /105°C, 100kHz)	ESR (mΩ max./20°C, 100kHz)	
680	8×11.5	1,140	36	
1,000	8×15	1,490	28	
1,000	10×12.5	1,540	26	
1,500	8×20	1,870	19	
1,500	10×16	2,000	19	
1,800	10×20	2,550	13	
2,200	10×25	2,800	12	

V <sub>dc</sub>		16		
Capacitance (μF)	∅ D×L(mm)	Rated Ripple Current (mA <sub>rms</sub> /105°C, 100kHz)	ESR (mΩ max./20°C, 100kHz)	
470	8×11.5	1,140	36	
680	8×15	1,490	28	
680	10×12.5	1,540	26	
1,000	8×20	1,870	19	
1,000	10×16	2,000	19	
1,500	10×20	2,550	13	
1,800	10×25	2,800	12	

V <sub>dc</sub>		25		
Capacitance (μF)	∅ D×L(mm)	Rated Ripple Current (mA <sub>rms</sub> /105°C, 100kHz)	ESR (mΩ max./20°C, 100kHz)	
220	8×11.5	1,140	36	
390	8×15	1,490	28	
560	8×20	1,870	19	
470	10×12.5	1,540	26	
680	10×16	2,000	19	
820	10×20	2,550	13	
1,000	10×25	2,800	12	

V <sub>dc</sub>		35		
Capacitance (μF)	∅ D×L(mm)	Rated Ripple Current (mA <sub>rms</sub> /105°C, 100kHz)	ESR (mΩ max./20°C, 100kHz)	
150	8×11.5	1,140	36	
270	8×15	1,490	28	
390	8×20	1,870	19	
330	10×12.5	1,540	26	
470	10×16	2,000	19	
560	10×20	2,550	13	
680	10×25	2,800	12	

## RATED RIPPLE CURRENT MULTIPLIERS

### Frequency Multipliers

Cap.(μF) \ Freq.(Hz)	120	1k	10k	100k
150 ~ 560	0.50	0.85	0.94	1.00
680 ~ 1,800	0.60	0.87	0.95	1.00
2,200 ~ 3,300	0.75	0.90	0.95	1.00