

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 _{DC}																
Operating Temperature Range	-40 ~ + 105°C																
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)																
Leakage Current	$I = 0.03CV(\mu\text{A})$ or $4\mu\text{A}$, 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 border="1"> <tr> <td>Rated Voltage(V_{DC})</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_{DC})	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. Capacitance change $\leq \pm 25\%$ of the initial value Tanδ $\leq 200\%$ of the initial specified value Leakage current \leq The initial specified value																
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. Capacitance change $\leq \pm 25\%$ of the initial value Tanδ $\leq 200\%$ of the initial specified value Leakage current $\leq 200\%$ of the initial specified value																
Others	Satisfied characteristics KS C IEC 60384-4																

DIMENSIONS OF NXE Series

Unit (mm)

		Marking : DARK BROWN SLEEVE, SILVER INK																
		<table border="1"> <tr> <td>ØD</td> <td>8</td> <td>10</td> </tr> <tr> <td>Ød</td> <td>0.6</td> <td>0.6</td> </tr> <tr> <td>F</td> <td>3.5</td> <td>5.0</td> </tr> <tr> <td>ØD'</td> <td colspan="2">$\phi D + 0.5$ max.</td></tr> <tr> <td>L'</td> <td colspan="2">$L + 1.5$ max. $L + 2.0$ max.</td></tr> </table>		ØD	8	10	Ød	0.6	0.6	F	3.5	5.0	ØD'	$\phi D + 0.5$ max.		L'	$L + 1.5$ max. $L + 2.0$ max.	
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RATING OF NXE series

V _{DC}	6.3		
Capacitance (μF)	$\phi D \times L$ (mm)	Rated Ripple Current (mArms/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 _{DC}	10		
Capacitance (μF)	$\phi D \times L$ (mm)	Rated Ripple Current (mArms/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 _{DC}	16		
Capacitance (μF)	$\phi D \times L$ (mm)	Rated Ripple Current (mArms/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 _{DC}	25		
Capacitance (μF)	$\phi D \times L$ (mm)	Rated Ripple Current (mArms/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 _{DC}	35		
Capacitance (μF)	$\phi D \times L$ (mm)	Rated Ripple Current (mArms/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