



MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

NXG Series

- 105°C 3,000~4,000Hrs assured.

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

NXE → NXG
High Ripple

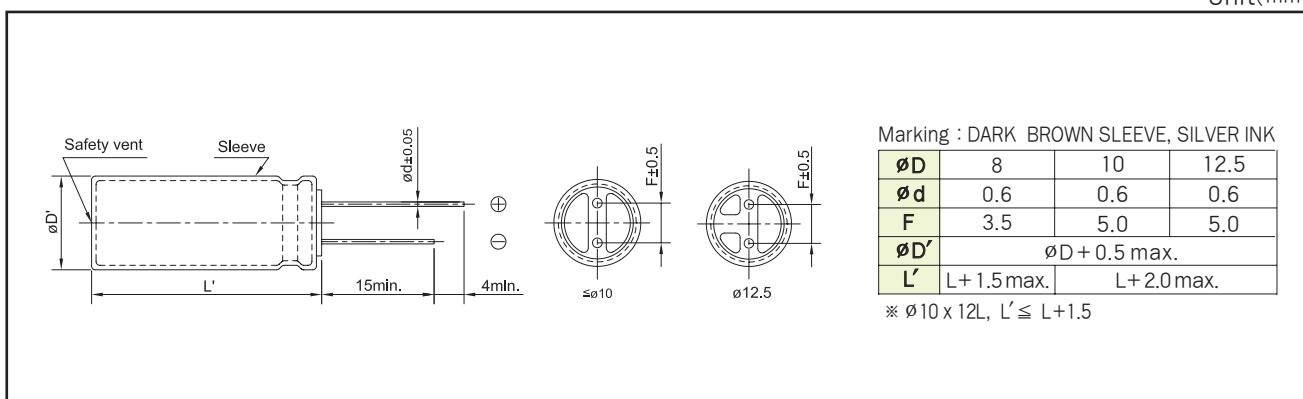


SPECIFICATIONS

Item	Characteristics																	
Rated Voltage Range	6.3 ~ 35 Vdc																	
Operating Temperature Range	-40 ~ + 105°C																	
Capacitance Tolerance	$\pm 20\%$ (M) (at 20°C, 120Hz)																	
Leakage Current	$I = 0.03CV(\mu A)$ or $4\mu A$, 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($\tan\delta$)	<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>$\tan\delta$(Max.)</td><td>0.22</td><td>0.19</td><td>0.16</td><td>0.14</td><td>0.12</td></tr> </table> <p>When the capacitance exceeds $1,000\mu F$, 0.02 shall be added every $1,000\mu F$ increase. (at 20°C, 120Hz)</p>						Rated Voltage(V_{DC})	6.3	10	16	25	35	$\tan\delta$ (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>$Z(-25^\circ C)/Z(+20^\circ C)$</td><td>2</td></tr> <tr> <td>$Z(-40^\circ C)/Z(+20^\circ C)$</td><td>3</td></tr> </table> <p>(at 120Hz)</p>						$Z(-25^\circ C)/Z(+20^\circ C)$	2	$Z(-40^\circ C)/Z(+20^\circ C)$	3								
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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>ϕD</td><td>Life Time</td></tr> <tr> <td>$\phi 8$</td><td>3,000 hours</td></tr> <tr> <td>$\phi 10 \sim$</td><td>4,000 hours</td></tr> </table> <p>Capacitance change $\leq \pm 25\%$ of the initial value $\tan\delta \leq 200\%$ of the initial specified value Leakage current \leq The initial specified value</p>						ϕD	Life Time	$\phi 8$	3,000 hours	$\phi 10 \sim$	4,000 hours						
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$\phi 8$	3,000 hours																	
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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> <p>Capacitance change $\leq \pm 25\%$ of the initial value $\tan\delta \leq 200\%$ of the initial specified value Leakage current $\leq 200\%$ of the initial specified value</p>																	
Others	Satisfied characteristics KS C IEC 60384-4																	

DIMENSIONS OF NXG Series

Unit(mm)



RATINGS OF NXG series

Vdc	6.3			
μF	Items	Ø D × L(mm)	Rated Ripple Current (mAmps/105°C, 100kHz)	ESR (Ω max./20°C, 100kHz) (Ω max./-10°C, 100kHz)
820		8 × 11.5	1,700	0.036 0.11
1,200		8 × 15	2,300	0.028 0.085
1,800		8 × 20	2,600	0.019 0.057
1,500		10 × 12	2,200	0.030 0.091
1,500		10 × 12.5	2,200	0.030 0.091
1,800		10 × 16	2,800	0.019 0.057
2,200		10 × 20	3,000	0.013 0.039
3,300		10 × 25	3,270	0.012 0.036

Vdc	10			
μF	Items	Ø D × L(mm)	Rated Ripple Current (mAmps/105°C, 100kHz)	ESR (Ω max./20°C, 100kHz) (Ω max./-10°C, 100kHz)
680		8 × 11.5	1,700	0.036 0.11
1,000		8 × 15	2,300	0.028 0.085
1,500		8 × 20	2,600	0.019 0.057
1,000		10 × 12	2,200	0.030 0.091
1,000		10 × 12.5	2,200	0.030 0.091
1,200		10 × 16	2,800	0.019 0.057
1,500		10 × 16	2,800	0.019 0.057
1,800		10 × 20	3,000	0.013 0.039
2,200		10 × 25	3,270	0.012 0.036

Vdc	16			
μF	Items	Ø D × L(mm)	Rated Ripple Current (mAmps/105°C, 100kHz)	ESR (Ω max./20°C, 100kHz) (Ω max./-10°C, 100kHz)
470		8 × 11.5	1,700	0.036 0.11
680		8 × 15	2,300	0.028 0.085
1,000		8 × 20	2,600	0.019 0.057
680		10 × 12	2,200	0.030 0.091
680		10 × 12.5	2,200	0.030 0.091
1,000		10 × 16	2,800	0.019 0.057
1,500		10 × 20	3,000	0.013 0.039
1,800		10 × 25	3,270	0.012 0.036

Vdc	25			
μF	Items	Ø D × L(mm)	Rated Ripple Current (mAmps/105°C, 100kHz)	ESR (Ω max./20°C, 100kHz) (Ω max./-10°C, 100kHz)
220		8 × 11.5	1,700	0.036 0.11
390		8 × 15	2,300	0.028 0.085
560		8 × 20	2,600	0.019 0.057
470		10 × 12	2,200	0.030 0.091
470		10 × 12.5	2,200	0.030 0.091
680		10 × 16	2,800	0.019 0.057
820		10 × 20	3,000	0.013 0.039
1,000		10 × 25	3,270	0.012 0.036
1,200		12.5 × 20	3,510	0.014 0.042

Vdc	35			
μF	Items	Ø D × L(mm)	Rated Ripple Current (mAmps/105°C, 100kHz)	ESR (Ω max./20°C, 100kHz) (Ω max./-10°C, 100kHz)
150		8 × 11.5	1,700	0.036 0.11
270		8 × 15	2,300	0.028 0.085
390		8 × 20	2,600	0.019 0.057
330		10 × 12	2,200	0.030 0.091
330		10 × 12.5	2,200	0.030 0.091
470		10 × 16	2,800	0.019 0.057
560		10 × 20	3,000	0.013 0.039
680		10 × 25	3,270	0.012 0.036

RATED RIPPLE CURRENT MULTIPLIERS

Frequency Multipliers

Cap.(μF)	Freq.(Hz)	120	1k	10k	50k	100k
150 ~ 560		0.50	0.85	0.94	0.96	1.00
680 ~ 1,800		0.60	0.87	0.95	0.97	1.00
2,200 ~ 3,300		0.75	0.90	0.95	0.97	1.00