

NXP(LXZ) Series

• 105°C 2,000 ~ 5,000Hrs assured.

- Low Impedance.
- For SMPS, IP-Board, Adaptor.
- RoHS compliant.
- Halogen-free capacitors are also available.
- AEC-Q200 compliant : Please contact us for more details, test data, information.

Solvent-proof

NXL(LXV)

NXP(LXZ)

Low Imp. Downsized



SPECIFICATIONS

Item	Characteristics														
Rated Voltage Range	6.3 ~ 50 V _{DC}														
Operating Temperature Range	-55 ~ +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 _{DC}) (at 20°C, 2 minutes)														
Dissipation Factor (Tanδ)	<table><tr><td>Rated Voltage(V_{DC})</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</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><td>0.10</td></tr></table> When the capacitance exceeds 1,000μF, 0.02 shall be added every 1,000μF increase. (at 20°C, 120Hz)	Rated Voltage(V _{DC})	6.3	10	16	25	35	50	TANδ(Max.)	0.22	0.19	0.16	0.14	0.12	0.10
Rated Voltage(V _{DC})	6.3	10	16	25	35	50									
TANδ(Max.)	0.22	0.19	0.16	0.14	0.12	0.10									
Load Life	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. <table><tr><td>Capacitance change</td><td>≤ ±20% 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>	Capacitance change	≤ ±20% of the initial value	Tanδ	≤ 200% of the initial specified value	Leakage Current	≤ The initial specified value								
Capacitance change	≤ ±20% of the initial value														
Tanδ	≤ 200% of the initial specified value														
Leakage Current	≤ 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. <table><tr><td>Capacitance change</td><td>≤ ±20% 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>	Capacitance change	≤ ±20% of the initial value	Tanδ	≤ 200% of the initial specified value	Leakage Current	≤ The initial specified value								
Capacitance change	≤ ±20% 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 NXP(LXZ) Series

Unit(mm)

01000

Side view of the capacitor showing dimensions: Safety vent ($\varnothing 6.3$), Sleeve, $\varnothing D'$, L' , 15min., 4min., and $\varnothing d \pm 0.05$.

Top view of the capacitor showing dimensions: $F \pm 0.5$ and $\varnothing 10$.

Top view of the capacitor showing dimensions: $F \pm 0.5$ and $\varnothing 12.5$.

Marking : DARK BROWN SLEEVE, SILVER INK

$\varnothing D$	6.3	8	10	12.5	16	18
$\varnothing d$	0.5	0.6	0.6	0.6	0.8	0.8
F	2.5	3.5	5.0	5.0	7.5	7.5
$\varnothing D'$	$\varnothing D + 0.5 \text{ max.}$					
L'	$L + 1.5 \text{ max.}$		$L + 2.0 \text{ max.}$			

※ $\varnothing 10 \times 12L$, $L' \leq L + 1.5$

RATED RIPPLE CURRENT MULTIPLIERS

Frequency Multipliers

Cap.(μF)	Freq.(Hz)	120	1k	10k	50k	100k
68 ~ 180		0.40	0.75	0.90	0.93	1.00
220 ~ 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 ~ 3,900		0.75	0.90	0.95	0.97	1.00
4,700 ~ 18,000		0.85	0.95	0.98	0.99	1.00



MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

RATINGS OF NXP(LXZ) Series

V _{DC} ØD×L(mm)	6.3				10				16			
	μF	IMP.		Ripple	μF	IMP.		Ripple	μF	IMP.		Ripple
		20°C	-10°C			20°C	-10°C			20°C	-10°C	
6.3 × 15	470	0.18	0.36	400	330	0.18	0.36	400	220	0.18	0.36	400
8 × 15	1,000	0.090	0.18	730	680	0.090	0.18	730	470	0.090	0.18	730
8 × 20	1,200	0.080	0.16	810	1,000	0.080	0.16	810	560	0.080	0.16	810
10 × 12	820	0.090	0.18	760	680	0.090	0.18	760	470	0.090	0.18	760
10 × 12.5	820	0.090	0.18	760	680	0.090	0.18	760	470	0.090	0.18	760
10 × 16	1,200	0.068	0.14	1,050	1,000	0.068	0.14	1,050	680	0.068	0.14	1,050
10 × 20	1,500	0.052	0.10	1,220	1,200	0.052	0.10	1,220	1,000	0.052	0.10	1,220
10 × 25	2,200	0.045	0.090	1,440	1,500	0.045	0.090	1,440	1,200	0.045	0.090	1,440
10 × 30	2,700	0.037	0.074	1,690	1,800	0.037	0.074	1,690	1,500	0.037	0.074	1,690
12.5 × 20	3,300	0.038	0.076	1,660	2,200	0.038	0.076	1,660	1,500	0.038	0.076	1,660
12.5 × 25	3,900	0.030	0.060	1,950	3,300	0.030	0.060	1,950	2,200	0.030	0.060	1,950
12.5 × 30	4,700	0.025	0.050	2,310	3,900	0.025	0.050	2,310	2,700	0.025	0.050	2,310
12.5 × 35	5,600	0.022	0.044	2,510	4,700	0.022	0.044	2,510	3,300	0.022	0.044	2,510
12.5 × 42.5	6,800	0.019	0.038	2,870	5,600	0.019	0.038	2,870	3,900	0.019	0.038	2,870
16 × 20	5,600	0.031	0.064	2,210	3,900	0.031	0.064	2,210	2,700	0.031	0.064	2,210
16 × 25	6,800	0.024	0.048	2,560	5,600	0.024	0.048	2,560	3,900	0.024	0.048	2,560
16 × 31.5	8,200	0.021	0.042	3,010	6,800	0.021	0.042	3,010	4,700	0.021	0.042	3,010
16 × 35.5	10,000	0.019	0.038	3,150	8,200	0.019	0.038	3,150	5,600	0.019	0.038	3,150
18 × 20	6,800	0.031	0.062	2,490	5,600	0.031	0.062	2,490	3,900	0.031	0.062	2,490
18 × 25	10,000	0.023	0.046	2,740	6,800	0.023	0.046	2,740	4,700	0.023	0.046	2,740
18 × 31.5	12,000	0.021	0.042	3,330	8,200	0.021	0.042	3,330	5,600	0.021	0.042	3,330
18 × 35.5	15,000	0.019	0.038	3,680	10,000	0.019	0.038	3,680	8,200	0.019	0.038	3,680
18 × 40	18,000	0.018	0.036	3,800	12,000	0.018	0.036	3,800	10,000	0.018	0.036	3,800

V _{DC} ØD×L(mm)	25				35				50			
	μF	IMP.		Ripple	μF	IMP.		Ripple	μF	IMP.		Ripple
		20°C	-10°C			20°C	-10°C			20°C	-10°C	
6.3 × 15	150	0.18	0.36	400	100	0.18	0.36	400	68	0.31	0.62	360
8 × 15	330	0.090	0.18	730	220	0.090	0.18	730	120	0.16	0.32	635
8 × 20	390	0.080	0.16	810	270	0.080	0.16	810	180	0.12	0.24	730
10 × 12	330	0.090	0.18	760	220	0.090	0.18	760	120	0.16	0.32	620
10 × 12.5	330	0.090	0.18	760	220	0.090	0.18	760	120	0.16	0.32	620
10 × 16	470	0.068	0.14	1,050	330	0.068	0.14	1,050	180	0.13	0.26	850
	680	0.068	0.14	1,130								
10 × 20	680	0.052	0.10	1,220	470	0.052	0.11	1,220	220	0.088	0.18	1,050
	820	0.052	0.10	1,320								
10 × 25	820	0.045	0.090	1,440	560	0.045	0.090	1,440	330	0.073	0.15	1,250
10 × 30	1,000	0.037	0.074	1,690	680	0.037	0.074	1,690	390	0.054	0.11	1,500
12.5 × 20	1,000	0.038	0.076	1,660	680	0.038	0.076	1,660	390	0.059	0.12	1,480
12.5 × 25	1,500	0.030	0.060	1,950	1,000	0.030	0.060	1,950	560	0.044	0.088	1,840
					1,500	0.030	0.060	2,200				
12.5 × 30	1,800	0.025	0.050	2,310	1,200	0.025	0.050	2,310	680	0.039	0.078	2,220
12.5 × 35	2,200	0.022	0.044	2,510	1,500	0.022	0.044	2,510	820	0.033	0.066	2,290
12.5 × 42.5	2,700	0.019	0.038	2,870	1,800	0.019	0.038	2,870	1,000	0.029	0.058	2,500
16 × 20	1,800	0.031	0.064	2,210	1,200	0.031	0.064	2,210	680	0.048	0.096	1,840
16 × 25	2,700	0.024	0.048	2,560	1,800	0.024	0.048	2,560	1,000	0.034	0.068	2,240
16 × 31.5	3,300	0.021	0.042	3,010	2,200	0.021	0.042	3,010	1,200	0.028	0.056	2,700
16 × 35.5	3,900	0.019	0.038	3,150	2,700	0.019	0.038	3,150	1,500	0.026	0.052	2,800
18 × 20	2,200	0.031	0.062	2,490	1,800	0.031	0.100	2,490	820	0.042	0.084	1,980
18 × 25	3,300	0.023	0.046	2,740	2,200	0.023	0.046	2,740	1,200	0.029	0.058	2,610
18 × 31.5	3,900	0.021	0.042	3,330	2,700	0.021	0.042	3,330	1,800	0.027	0.054	2,750
18 × 35.5	4,700	0.019	0.038	3,680	3,300	0.019	0.038	3,680	2,200	0.025	0.050	2,900
18 × 40	5,600	0.018	0.036	3,800	3,900	0.018	0.036	3,800	2,700	0.022	0.044	3,200

↑ Rated Ripple Current (mA rms/105°C, 100kHz)
↑ Impedance (Ω max./100kHz)
↑ Nominal Capacitance (μF)