ALUMINUM ELECTROLYTIC CAPACITORS

LYZ series

FEATURES

- Load Life:105℃ 2000~3000hours.
- ULTRA. Low impedance at 100kHz

SPECIFICATIONS

<table>
<tr><td>Item</td><td>Performance Characteristics</td></tr>
<tr><td>Item</td><td>Characteristics</td></tr>
<tr><td>Operating Temperature Range</td><td>－40℃～＋105℃</td></tr>
<tr><td>Rated Voltage Range</td><td>6.3~50V</td></tr>
<tr><td>Capacitance Range</td><td>22~6800 μF</td></tr>
<tr><td>Capacitance Tolerance</td><td>±20% (20℃,120Hz)</td></tr>
<tr><td>Leakage Current (MAX)</td><td>I=0.01CV or 3 μA whichever is greater.(After 2 minutes)
I=Leakage Current(μA) , C=Nominal Capacitance(μF) , V=Rated Voltage(V)</td></tr>
<tr><td>Dissipation Factor (tan δ)</td><td>When nominal capacitance is over 1000 μF, tan δ shall be added 0.02 to the listed value with increase of every 1000 μF
<table>
<tr><td>Rated voltage (V)</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50/100</td><td>MAX,20℃ 120HZ</td></tr>
<tr><td>Tan δ (MAX)</td><td>0.15</td><td>0.14</td><td>0.12</td><td>0.10</td><td>0.10</td><td>0.08/0.07</td><td></td></tr>
</table></td></tr>
<tr><td>Low Temperature Stability Impedance Ratio (MAX)</td><td>Measurement frequency:120Hz
<table>
<tr><td>Rated Voltage(V)</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td><td>MAX 120HZ</td></tr>
<tr><td>Z(-25℃)/Z(+20℃)</td><td>5</td><td>4</td><td>3</td><td>3</td><td>3</td><td>3</td><td></td></tr>
<tr><td>Z(-40℃)/Z(+20℃)</td><td>10</td><td>8</td><td>5</td><td>4</td><td>4</td><td>4</td><td></td></tr>
</table></td></tr>
<tr><td>Load Life</td><td>After life test at conditions stated in the table below, the capacitors shall meet the following requirement.
<table>
<tr><td>Leakage Current</td><td>Not more than the specified value</td></tr>
<tr><td>Capacitance Change</td><td>Within ±25% of initial value.</td></tr>
<tr><td>tan δ</td><td>Not more than 200% the specified value</td></tr>
</table>
<table>
<tr><td>Case Dia</td><td>Life Time(hrs)</td></tr>
<tr><td>φD≦6.3</td><td>2000</td></tr>
<tr><td>φD=8</td><td>2000</td></tr>
<tr><td>φD=10</td><td>3000</td></tr>
<tr><td>φD≧12.5</td><td>3000</td></tr>
</table></td></tr>
<tr><td>Shelf Life</td><td>After leaving capacitors under no load of 105℃ for 1000 hours and applying voltage according to JIS C-5102 4-3, they meet the specified value for load life characteristics listed above.</td></tr>
<tr><td>Standard</td><td>JIS C 5141</td></tr>
</table>

MULTIPLIER FOR RIPPLE CURRENT

Frequency coefficient

Cap(Uf) \ FREQUENCY (Hz)	60(50)	120	1K	10K	≧100K
6.8-33	0.45	0.55	0.75	0.90	1.00
39-330	0.60	0.70	0.85	0.95	1.00
390-1000	0.65	0.75	0.90	0.98	1.00
1200-18000	0.75	0.80	0.95	1.00	1.00

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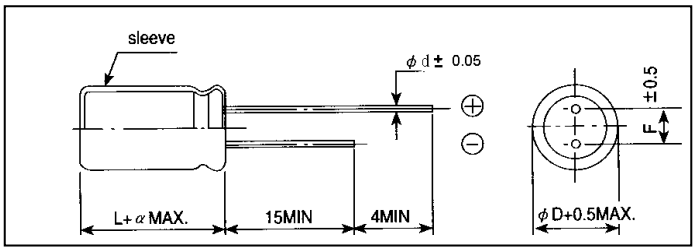
DIMENSIONS (mm)



φD	5	6.3	8	10	12.5	16	18
φd	0.5		0.6			0.8	
F	2.0	2.5	3.5	5.0		7.5	
α	L≦16: α=1.5			L≧20: α=2.0			

STANDARD SIZE AND PERMISSIBLE RIPPLE CURRENT

Ripple Current (mAr.m.s./105℃,100kHz)

Rated voltage 6.3V(OJ)				
Nominal capacitance (μF)	Size φDXL(mm)	Ripple Current	Impedance Ω(MAX)	
			20℃,100kHz	-10℃,100kHz
100	5x11	280	0.33	1.16
150	5x11	300	0.29	0.98
220	6.3x11	377	0.205	0.685
330	6.3x11	455	0.12	0.39
470	6.3x11	543	0.105	0.36
470	8x11.5	632	0.09	0.33
1000	8x11.5 8x15	816 908	0.071 0.062	0.25 0.21
820	8x16	1045	0.055	0.15
1000	8x16	1000	0.052	0.17
1200	8x20	1300	0.040	0.13
1500	8x20	1485	0.035	0.110
1200	10x16	1480	0.037	0.11
1500	10x16	1675	0.030	0.089
1500	10x20	1870	0.022	0.067
2200	10x23	2200	0.021	0.064
2200	10x23	2225	0.021	0.061
2700	10x28	2250	0.020	0.058
3300	10x23	2290	0.020	0.056
3300	10x28	2330	0.020	0.053
4700	10x28	2835	0.018	0.046
4700	10x30	2835	0.018	0.046
3300	12.5x20	2410	0.020	0.048
3900	12.5x25	2820	0.017	0.043
4700	12.5x30	3340	0.015	0.039
5600	12.5x35	3400	0.014	0.037
5600	16x20	3190	0.017	0.043
6800	16x25	3510	0.015	0.041

ALUMINUM ELECTROLYTIC CAPACITORS

LYZ series

Ripple Current (mAr.m.s./105℃,100kHz)

Rated voltage 10V(1A)				
Nominal capacitance (μF)	Size ΦDXL(mm)	Ripple Current	Impedance Ω(MAX)	
			20℃,100kHz	-10℃,100kHz
100	5x11	300	0.29	0.98
220	6.3x11	455	0.12	0.39
330	6.3x11	543	0.11	0.35
470	6.3x11	632	0.10	0.30
470	8x11.5	810	0.071	0.20
680	8x16	1046	0.055	0.15
1000	8x15	1110	0.051	0.14
1000	8x16	1173	0.047	0.13
1000	8x20	1300	0.040	0.11
1200	8x20	1530	0.036	0.099
1500	8x20	1760	0.031	0.087
680	10x12.5	1080	0.052	0.14
1000	10x12.5	1280	0.045	0.12
1000	10x16	1480	0.037	0.10
1200	10x20	1870	0.022	0.067
1500	10x23	2220	0.021	0.064
2200	10x23	2365	0.020	0.061
2200	10x25	2400	0.022	0.067
3300	10x23	2437	0.020	0.059
3300	10x28	2510	0.019	0.057
3300	10x30	2520	0.019	0.057
2200	12.5x20	2410	0.020	0.051
3300	12.5x25	2820	0.017	0.043
3900	12.5x30	3340	0.015	0.039
4700	12.5x35	3450	0.014	0.037
6800	12.5x35	3480	0.016	0.044
5600	16x25	3510	0.015	0.041

ALUMINUM ELECTROLYTIC CAPACITORS

LYZ series

Ripple Current (mAr.m.s./105℃,100kHz)

Rated voltage 16V(1C)				
Nominal capacitance (μF)	Size ΦDXL(mm)	Ripple Current	Impedance Ω(MAX)	
			20℃,100kHz	-10℃,100kHz
56	5x11	300	0.29	0.98
100	5x11	378	0.21	0.69
120	6.3x11	455	0.12	0.39
150	6.3x11	632	0.096	0.30
180	6.3x11	676	0.090	0.275
220	6.3x11	721	0.084	0.25
330	8x11.5	810	0.071	0.20
470	8x15 8x16	1045 1045	0.055 0.055	0.15 0.15
680	8x20	1300	0.040	0.12
1000	8x20	1585	0.031	0.094
470	10x12.5	1080	0.052	0.14
680	10x16	1480	0.040	0.11
1000	10x16	1675	0.031	0.089
1000	10x20	1870	0.022	0.067
1500	10x20	2140	0.021	0.059
1200	10x23	2200	0.021	0.064
2200	10x28	2510	0.019	0.054
2200	10x30	2410	0.023	0.067
1500	12.5x20	2410	0.020	0.051
2200	12.5x25	2820	0.017	0.043
2700	12.5x30	3340	0.015	0.039
3300	12.5x30	3395	0.015	0.038
3300	12.5x35	3450	0.014	0.037
4700	12.5x35	3320	0.013	0.021
2700	16x20	3190	0.017	0.043
3300	16x25	3350	0.016	0.042
3900	16x25	3510	0.015	0.041

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LYZ series

Ripple Current (mAr.m.s./105℃,100kHz)

Rated voltage 25V(1E)				
Nominal Capacitance (μF)	Size ΦDXL(mm)	Ripple Current	Impedance Ω (MAX)	
			20℃,100kHz	-10℃,100kHz
22	5x11	180	0.46	1.50
47	5x11	300	0.29	0.98
100	6.3x11	455	0.12	0.39
220	8x11.5	810	0.071	0.20
220	8x16	925	0.063	0.175
330	8x16	1045	0.055	0.15
330	8x20	1172	0.048	0.13
390	8x20	1236	0.044	0.12
470	8x20	1300	0.040	0.11
330	10x12.5	1080	0.052	0.14
470	10x16	1480	0.037	0.10
560	10x16	1675	0.030	0.084
680	10x16	1772	0.026	0.076
680	10x20	1870	0.022	0.067
820	10x23	2200	0.021	0.064
1000	10x23	2305	0.021	0.058
1000	12.5x20	2410	0.020	0.051
1200	12.5x20	2550	0.019	0.043
1500	12.5x25	2820	0.017	0.043
1800	12.5x25	2960	0.017	0.042
2200	12.5x25	3105	0.016	0.041
1800	12.5x30	3340	0.015	0.039
2200	12.5x30	3390	0.015	0.038
2200	12.5x35	3450	0.014	0.037
1800	16x20	3190	0.017	0.043
2700	16x25	3510	0.015	0.041

ALUMINUM ELECTROLYTIC CAPACITORS

LYZ series

Ripple Current (mAr.m.s./105℃,100kHz)

Rated voltage 35V(1V)				
Nominal Capacitance (μF)	Size ΦDXL(mm)	Ripple Current	Impedance Ω(MAX)	
			20℃,100kHz	-10℃,100kHz
33	5x11	300	0.29	0.98
56	6.3x11	455	0.12	0.39
100	6.3x11	540	0.108	0.345
100	8x11.5	632	0.095	0.30
150	8x11.5	810	0.071	0.20
220	8x16	1045	0.055	0.15
270	8x20	1300	0.040	0.11
220	10x12.5	1080	0.052	0.14
220	10x16	1280	0.045	0.12
330	10x16	1480	0.037	0.10
330	10x20	1675	0.030	0.084
470	10x20	1870	0.022	0.067
560	10x23	2200	0.021	0.064
680	10x28	2305	0.021	0.058
680	12.5x20	2410	0.020	0.051
1000	12.5x25	2820	0.017	0.043
1200	12.5x30 16x20	3340 3190	0.015 0.017	0.039 0.043
1500	12.5x35	3450	0.014	0.037
1200	16x20	3190	0.017	0.043

Rated voltage 50V(1H)				
Nominal capacitance (μF)	Size ΦDXL(mm)	Ripple Current	Impedance Ω(MAX)	
			20℃,100kHz	-10℃,100kHz
22	5x11	288	0.33	1.16
47	6.3x11	360	0.23	0.82
56	6.3x11	435	0.13	0.48
100	8x11.5	774	0.073	0.20
120	8x16	1000	0.060	0.16
180	8x20	1240	0.045	0.12
150	10x12.5	1029	0.060	0.16
220	10x16	1420	0.041	0.10
270	10x20	1630	0.029	0.088
330	10x23	1920	0.027	0.083
470	12.5x20	2100	0.026	0.066
560	12.5x25	2460	0.022	0.057
680	12.5x25 12.5x30	2680 2910	0.021 0.020	0.054 0.050
820	12.5x35	3010	0.018	0.049
820	16x20	2780	0.022	0.057
1000	16x25	3060	0.020	0.054