

ALUMINUM ELECTROLYTIC CAPACITORS

TA Low Impedance & Long Life Series

- Features : 105°C 4000~10000hrs Low Impedance and long Life
- Recommended Applications:
Applicable for SMPS, Adaptor, Charger, Monitor/Computer
- Corresponding product to RoHS

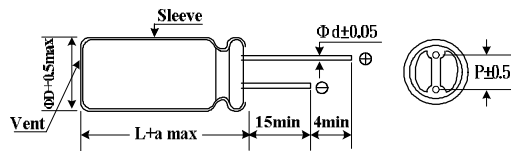
TA
↑
SY Long Life



Specifications

Item	Characteristics																								
Operating Temperature Range	-40 ~ +105°C																								
Rated Voltage Range	6.3~35VDC																								
Rated Capacitance Range	33 ~ 8200μF																								
Capacitance Tolerance	± 20 % at 120Hz , 20°C																								
Leakage Current (MAX) (20°C)	I=0.01CV or 3(μA) , whichever is greater. (After rated voltage applied for 2 minutes) I= Leakage Current (μA) C= Nominal Capacitance (μF) V= Rated Voltage (V) (20°C)																								
Dissipation Factor (MAX) (tanδ) (120Hz ,20°C)	<table border="1"> <tr> <td>WV</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> </tr> <tr> <td>tanδ</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 nominal capacitance is over 1000uF, Tanδ shall be added 0.02 to the listed value with increase of every 1000uF.</p>	WV	6.3	10	16	25	35	tanδ	0.22	0.19	0.16	0.14	0.12												
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tanδ	0.22	0.19	0.16	0.14	0.12																				
Low Temperature Stability Impedance Ratio (MAX)	<table border="1"> <tr> <td rowspan="3">Z(120Hz)</td> <td>WV</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> </tr> <tr> <td>Z-25°C / Z+20°C</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z-40°C / Z+20°C</td> <td>8</td> <td>6</td> <td>4</td> <td>3</td> <td>3</td> </tr> </table>	Z(120Hz)	WV	6.3	10	16	25	35	Z-25°C / Z+20°C	4	3	2	2	2	Z-40°C / Z+20°C	8	6	4	3	3					
Z(120Hz)	WV		6.3	10	16	25	35																		
	Z-25°C / Z+20°C		4	3	2	2	2																		
	Z-40°C / Z+20°C	8	6	4	3	3																			
Endurance	<p>After applying rated voltage with rated ripple current for 4000~10000hours at 105°C, the capacitors shall meet the following requirements.</p> <table border="1"> <tr> <td>Capacitance Change</td> <td colspan="3">Within ± 25 % of initial value</td> </tr> <tr> <td>Dissipation Factor</td> <td colspan="3">200% or less of initial specified value</td> </tr> <tr> <td>Leakage Current</td> <td colspan="3">initial specified value or less</td> </tr> </table> <table border="1"> <tr> <td>VDC</td> <td>φ5~6.3φ</td> <td>φ8~10φ</td> <td>φ12.5~18φ</td> </tr> <tr> <td>6.3~10(V)</td> <td>4000hrs</td> <td>6000hrs</td> <td>8000hrs</td> </tr> <tr> <td>16~100(V)</td> <td>5000hrs</td> <td>7000hrs</td> <td>10000hrs</td> </tr> </table>	Capacitance Change	Within ± 25 % of initial value			Dissipation Factor	200% or less of initial specified value			Leakage Current	initial specified value or less			VDC	φ5~6.3φ	φ8~10φ	φ12.5~18φ	6.3~10(V)	4000hrs	6000hrs	8000hrs	16~100(V)	5000hrs	7000hrs	10000hrs
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VDC	φ5~6.3φ	φ8~10φ	φ12.5~18φ																						
6.3~10(V)	4000hrs	6000hrs	8000hrs																						
16~100(V)	5000hrs	7000hrs	10000hrs																						
Shelf Life	After placed at 105°C without voltage applied for 1000 hours, the capacitors shall meet the same requirement as load life.																								

Diagram of Dimensions



ψD	5	6.3	8	10	13	16	18
P	2.0	2.5	3.5	5.0	5.0	7.5	7.5
ψd	0.5	0.5	0.6	0.6	0.6	0.8	0.8
a	1.5	1.5	1.5	1.5	2.0	2.0	2.0

Multiplier for Ripple Current

Frequency coefficient

Freq. (Hz)	120	1K	10K	100K
Cap(μF)				
6.8 to 180	0.40	0.75	0.90	1.00
220 to 560	0.50	0.85	0.94	1.00
680 to 1800	0.60	0.87	0.95	1.00
2200 to 3900	0.75	0.90	0.95	1.00
4700μF Higher	0.85	0.95	0.98	1.00



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■ Dimensions, Rated Ripple Current, Max Impedance

Capacitance (μF)	Rated (Surge) Voltage														
	6.3V (8)			10V (13)			16V (20)			25V (32)			35V (44)		
	SIZE	Ripple	Z	SIZE	Ripple	Z	SIZE	Ripple	Z	SIZE	Ripple	Z	SIZE	Ripple	Z
33													5x11	210	0.58
47										5x11	210	0.58			
56							5x11	210	0.58				6.3x11	340	0.22
100				5x11	210	0.58				6.3x11	340	0.22			
120							6.3x11	340	0.22						
150	5x11	210	0.58										8x11	640	0.13
220				6.3x11	340	0.220				8x11	640	0.13	8x15	840	0.087
270													10x12.5	865	0.080
330	6.3x11	340	0.22				8x11	640	0.130	8x15	840	0.087	10x15	1210	0.060
470				8x11	640	0.130	8x15	840	0.087	8x20	1050	0.069	10x20	1400	0.046
560							10x12.5	865	0.080	10x15	1210	0.060	13x16	1450	0.049
680	8x11	640	0.13	8x15	840	0.087	8x20	1050	0.069	10x20	1400	0.046	10x30	1910	0.031
820				10x12.5	865	0.080	10X15	1210	0.060	13x16	1450	0.049	13x20	1900	0.035
1000	10x12.5	865	0.080							10x25	1650	0.042			
1200	8x15	840	0.087	8x20	1050	0.069	10x20	1400	0.046	10x30	1910	0.031	13x25	2230	0.027
1500				10X15	1210	0.060	13x16	1450	0.049	13x20	1900	0.035			
1800	8x20	1050	0.069	10x20	1400	0.046	10x25	1650	0.042				13x30	2650	0.024
2200	10x20	1400	0.046	10x25	1650	0.042	10x30	1910	0.031	13x25	2230	0.027	16x20	2530	0.027
2700				13x16	1450	0.049	13x20	1900	0.035				13x35	2880	0.020
3300	13x16	1450	0.049							13x30	2650	0.024	13x40	3350	0.017
3900										16x20	2530	0.027	16x25	2930	0.021
4700										18x20	2860	0.026	18x25	2930	0.021
5600	10x25	1650	0.042	10x30	1910	0.031	13x25	2230	0.027	13x35	2880	0.020	16x32	3450	0.017
6800				13x20	1900	0.035				18x20	2860	0.026	18x32	3140	0.019
8200	10x30	1910	0.031				13x30	2650	0.024	13x40	3350	0.017	16x36	3610	0.015
10000							16x20	2530	0.027	16x25	2930	0.021	18x36	4170	0.015
12000										18x20	2860	0.026			
15000	13x20	1900	0.035	13x25	2230	0.027	13x35	2880	0.020	16x32	3450	0.017	16x40	4080	0.013
18000										18x25	3140	0.019	18x36	4220	0.014
22000	13x25	2230	0.027	13x30	2650	0.024	13x40	3350	0.017	16x36	3610	0.015	18x40	4280	0.012
27000				16x20	2530	0.027	16x25	2930	0.021	18x32	4170	0.015			
33000	13x30	2650	0.024	13x35	2880	0.020	16x32	3450	0.017	16x40	4080	0.013			
39000							18x25	3140	0.019	18x36	4220	0.014			
47000	13x35	2880	0.020	13x40	3350	0.017	16x36	3610	0.015	18x40	4280	0.012			
56000	16x20	2530	0.027	16x25	2930	0.021	18x32	4170	0.015						
68000				18x20	2860	0.026									
82000	13x40	3350	0.017	16x32	3450	0.017	16x40	4080	0.013						
	16x25	2930	0.021	18x25	3140	0.019									
	18x20	2860	0.026												
	16x32	3450	0.017	16x36	3610	0.015	18x36	4220	0.014						
				18x32	4170	0.015									

☆ Size: D φ x L (mm) ☆ Ripple Current: (mA/rms), 105°C, 100KHz ☆ Impedance (Ω), 20°C, 100KHz