

ALUMINUM ELECTROLYTIC CAPACITOR

FEATURES

- Load life of 2000 hours at 105°C
- Low impedance, High ripple current
- For switching mode power supplies (SMPS) and industry electronics



SPECIFICATIONS

ITEMS	PERFORMANCE							CHARACTERISTICS									
Operating Temperature Range(°C)	-40~+105							-25~+105									
Rated Voltage Range (V)	6.3~100							160~400									
Capacitance Tolerance(25°C, 120Hz)	±20%																
Leakage Current(μA)	0.01 CV or 3 whichever is greater. (at 25°C, after 2 minutes)							CV≤ 1000:0.1CV+40 (at 25°C, after 1 minute)									
								CV≥ 1000:0.04CV+100 (at 25°C, after 1 minute)									
C: Nominal Capacitance (μF) V: Rated Voltage (V)																	
Dissipation Factor(25°C, 120Hz)	Rated Voltage(V)	6.3	10	16	25	35	50	63	100	160	200	250	315	350	400		
	Tan δ	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.08	0.15	0.15	0.15	0.20	0.20	0.20		
	When nominal capacitance is over 1000μF. Tan δshall be added 0.02 to the listed value with increase of every 1000μF																
Temperature Stability(120Hz)	Rated Voltage (V)				6.3	10	16	25	35	50	63	100	Rated Voltage (V)			160~250	315~400
	Impedance	Z-25°C/Z+20°C		4	3	2				Impedance	Z-25°C/Z+20°C		3				
		Z-55°C/Z+20°C		8	6	4	3				Z-55°C/Z+20°C		8	6			
Load Life(+85°C)	Time							2000 hours. (ΦD 8,1000 hours)									
	Leakage current							Not more than the specified value.									
	Capacitance Change							Within±20% of initial value.									
	Dissipation factor							Not more than 200% of the specified value.									
Shelf Life(105°C)	1000hours. No voltage applied. After test: UR to be applied for 30 minutes, 24 to 48 hours before measurement.																

DIMENSIONS

Technical drawing of a sleeve connection for a vent. The side view shows a sleeve with a flange on the right. Dimensions include: Vent diameter $\Phi \geq 6.3$, sleeve outer diameter $\Phi D \pm 0.5 \text{ Max}$, sleeve length $L \pm a \text{ Max}$, sleeve thickness 15 Min , and flange thickness 5 Min . The flange has a diameter $\Phi d \pm 0.05$. The end view shows a circular flange with four bolt holes, each with a diameter $F \pm 0.5$.

ΦD	5	6.3	8	10	12.5	16	18
F	2.0	2.5	3.5	5.0		7.5	
Φd	0.5		0.6			0.8	
a	1.0			$L < 16: 1.0$ $L \geq 16: 2.0$			

mm MULTIPLIER FOR RIPPLE CURRENT

Frequency coefficient						
Rated Voltage(V)	Freq(Hz)	50	120	1K	10K	100K
6.3~100	Cap (μF)					
	0.1~4.7	—	0.4	0.7	0.8	1.0
	10~47	—	0.5	0.8	0.9	1.0
	100~220	—	0.7	0.9	0.9	1.0
	330~1000	—	0.8	0.8	1.0	1.0
	2200~15000	—	0.9	1.0	1.0	1.0
160~400	0.47~220	0.80	1.0	1.3	1.4	1.6
Temperature coefficient						
Rated Voltage(V)	Temperature(°C)	+70	+85	+105		
6.3~100		2.0	1.7	1.0		
160~400		1.8	1.4	1.0		

STANDARD RATINGS

WV/V Cap/μF	6.3			10			16			25		
	Size	Impedance	Ripple	Size	Impedance	Ripple	Size	Impedance	Ripple	Size	Impedance	Ripple
	□DxL(mm)	Ω	mArms	□DxL(mm)	Ω	mArms	□DxL(mm)	Ω	mArms	□DxL(mm)	Ω	mArms
4.7	—	—	—	—	—	—	—	—	—	5X11	3.0	85
10	—	—	—	—	—	—	5X11	1.9	105	5X11	2.5	92
22	—	—	—	5X11	2.5	92	5X11	1.9	105	5X11	1.9	105
33	5x11	2.5	105	5X11	1.9	105	5X11	1.5	120	5X11	1.5	120
47	5x11	1.5	120	5X11	1.5	120	5X11	1.2	130	5X11	1.2	130
100	5x11	1.2	130	5X11	1.2	130	6.3X11	0.58	220	6.3X11	0.58	220
220	6.3x11	0.87	180	6.3X11	0.58	220	8X11.5	0.47	290	8X11.5	0.39	315
330	6.3x11	0.58	220	8x11.5	0.47	265	8X11.5	0.39	315	10X12.5	0.23	500
470	8x11.5	0.39	315	8x11.5	0.39	315	10X12.5	0.23	500	10X16	0.18	615
1000	10x12.5	0.23	500	10x16	0.18	615	10X20	0.12	825	12.5X20	0.090	1050

WV/V	6.3			10			16			25		
	Size	Impedance	Ripple	Size	Impedance	Ripple	Size	Impedance	Ripple	Size	Impedance	Ripple
	□DxL(mm)	Ω	mArms	□DxL(mm)	Ω	mArms	□DxL(mm)	Ω	mArms	□DxL(mm)	Ω	mArms
2200	12.5x20	0.095	1000	12.5x20	0.090	1050	12.5X25	0.068	1300	16X25	0.056	1740
3300	12.5x20	0.090	1050	12.5x25	0.068	1300	16X25	0.056	1740	16X31.5	0.045	2110
4700	16x25	0.061	1670	16x25	0.056	1740	16X31.5	0.045	2100	18X35.5	0.036	2580
6800	16x25	0.056	1740	16x31.5	0.045	2110	18X35.5	0.036	2580	--	--	--
10000	16x31.5	0.045	2110	18x35.5	0.036	2580	--	--	--	--	--	--
15000	18x35.5	0.036	2580	--	--	--	--	--	--	--	--	--

WV/V	35			50			63			100		
	Size	Impedance	Ripple	Size	Impedance	Ripple	Size	Impedance	Ripple	Size	Impedance	Ripple
	□DxL(mm)	Ω	mArms	□DxL(mm)	Ω	mArms	□DxL(mm)	Ω	mArms	□DxL(mm)	Ω	mArms
0.1	--	--	--	5x11	18.0	10	--	--	--	--	--	--
0.22	--	--	--	5x11	13.0	15	--	--	--	--	--	--
0.33	--	--	--	5x11	10.0	15	--	--	--	--	--	--
0.47	--	--	--	5x11	7.0	23	--	--	--	5x11	13.0	30
1	--	--	--	5x11	4.9	35	--	--	--	5x11	11.0	45
2.2	--	--	--	5x11	4.2	35	--	--	--	5x11	9.2	60
3.3	--	--	--	5x11	3.9	65	--	--	--	5x11	7.2	67
4.7	5X11	2.5	92	5x11	3.6	82	5x11	5.8	74	5x11	6.3	75
10	5X11	1.9	105	5x11	2.7	100	5x11	3.6	95	6.3x11	3.3	110
22	5X11	1.5	120	5x11	1.9	125	6.3x11	2.1	130	8x11.5	1.4	165
33	5X11	1.2	130	6.3x11	1.1	195	6.3x11	1.7	160	10x12.5	0.94	305
100	8X11.5	0.39	315	8x11.5	0.50	385	10x125	0.65	395	12.5x20	0.28	585
330	10X16	0.18	615	10x20	0.18	675	12.5x20	0.22	660	16x25	0.13	1290
1000	12.5X25	0.068	1300	16x25	0.076	1495	16x31.5	0.098	1430	--	--	--
3000	18X35.5	0.036	2580	--	--	--	--	--	--	--	--	--

WV/V	160		200		250		315		350		400	
	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
	□DxL(mm)	mArms	□DxL(mm)	mArms	□DxL(mm)	mArms	□DxL(mm)	mArms	□DxL(mm)	mArms	□DxL(mm)	mArms
0.47	6.3x11	12	6.3x11	12	6.3x11	12	6.3x11	11	6.3x11	11	--	--
1	6.3x11	18	6.3x11	18	6.3x11	18	6.3x11	18	6.3x11	18	8x11.5	18
2.2	6.3x11	26	6.3x11	26	8x11.5	30	8x11.5	30	8x11.5	30	10x12.5	30
3.3	8x11.5	37	8x11.5	37	10x12.5	43	10x12.5	36	10x12.5	36	10x16	40
4.7	8x11.5	44	10x12.5	50	10x16	50	10x16	47	10x16	47	10X20	52
10	10x12.5	75	10x16	80	10X20	90	10x20	79	12.5x20	79	12.5x20	79
22	10x20	135	10x20	135	12.5x25	155	12.5x25	130	12.5x25	130	16x25	130
33	12.5x20	175	12.5x20	190	16x25	190	16x25	160	16x25	160	16X31.5	175
47	12.5x25	230	12.5x25	230	16X31.5	225	16X31.5	210	16x31.5	210	18x35.5	220
100	16x25	330	16x31.5	360	18X40	340	18x40	335	18x40	335	--	--
220	18x35.5	500	18x40	525	--	--	--	--	--	--	--	--