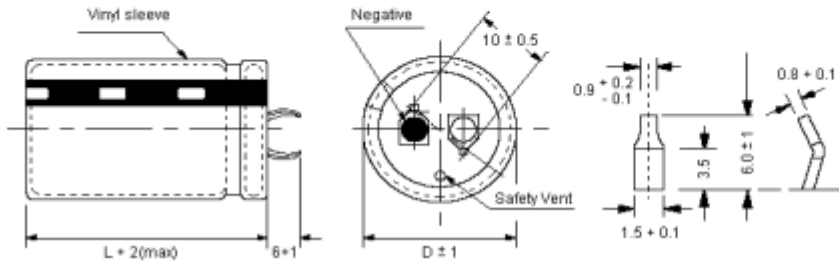


ALUMINIUM ELECTROLYTIC CAPACITOR KG Series

FEATURES

- ◆ Standard snap-in terminal spacing fixed at 10mm which can be mounted to PCB directly without holder
- ◆ With high ripple current endurance
- ◆ Applications for use in power supplies, OA equipment, TV set and audio as a filter

OUTLINE



P.C.B. Terminal (SNAP-IN)

SPECIFICATIONS

Items	Characteristics														
Capacitance Tolerance (120Hz, 25°C)	± 20% (M)														
Rated Working Voltage Range	10 ~ 100Vdc							160 ~ 450Vdc							
Operation Temperature	-40°C ~ +85°C							-25°C ~ +85°C							
Leakage Current (25°C)	(After 2 minutes applying the DC working voltage)							(After 5 minutes applying the DC working voltage)							
	$I \leq 0.01CV (\mu A)$							$I \leq 0.03CV (\mu A)$							
◆ I : Leakage Current (μA) ◆ C : Rated Capacitance (μF) ◆ V : Working Voltage (V)															
Surge Voltage (25°C)	W.V.	10	16	25	35	40	50	63	100	160	200	250	350	400	450
	S.V.	13	20	32	44	50	63	79	125	200	250	300	400	450	500
Dissipation Factor (120Hz, 25°C)	W.V.	10	16	25	35	40	50	63	100	160	200	250	350	400	450
	$\tan \delta$	0.55	0.50	0.45	0.45	0.35	0.30	0.25	0.20	0.15	0.15	0.15	0.20	0.20	0.20
Temperature Characteristics	W.V.	10	16	25	35	40	50	63	100	160	200	250	350	400	450
	- 25°C / + 25°C	4	4	3	3	2	2	2	2	4	4	4	4	4	8
	- 40°C / + 25°C	15	15	10	8	6	6	5	5	-	-	-	-	-	-
◆ Impedance ratio at 120Hz															
Load Test	After 2000 hours application of WV at +85°C, the capacitor shall meet the following limits:														
	Capacitance Change	$\leq \pm 20\%$ of initial value													
	$\tan \delta$	$\leq 150\%$ of initial specified value													
	Leakage Current	\leq initial specified value													
Shelf Test	After 1000 hours, no voltage applied at +85°C, the capacitor shall meet the following limits:														
	Capacitance Change	$\leq \pm 20\%$ of initial value													
	$\tan \delta$	$\leq 150\%$ of initial specified value													
	Leakage Current	$\leq 200\%$ of initial specified value													

■ DIMENSIONS

D x L (mm)

uF	WV Item	10				16									
		22	25	30	35	22	25	30	35						
8200						22x25	2.30								
10000						22x30	2.53								
12000	22x25	2.17				22x30	2.82	22x25	2.66						
15000	22x30	2.59	25x25	2.59		22x35	3.32	25x30	3.28	30x25	3.36				
18000	22x30	2.89	25x25	2.77		22x40	3.58	25x35	3.58	30x30	3.48				
22000	22x35	3.41	25x30	3.29	30x25	3.18		22x50	4.07	25x40	4.00	30x30	3.94		
27000	22x40	3.64	25x35	3.64	30x30	3.59				25x45	4.48	30x35	4.34	35x30	4.34
33000	22x50	4.12	25x40	4.10	30x30	4.12				25x50	4.94	30x40	4.84	35x30	4.80
39000			25x45	4.76	30x35	4.69	35x30	4.55				30x45	5.50	35x35	5.41
47000			25x50	5.20	30x40	5.20	35x35	5.17				30x50	6.12	35x40	6.12
56000					30x45	5.93	35x35	5.76						35x45	6.86
68000					30x50	6.75	35x40	6.73							
82000							35x50	7.65							

uF	WV Item	25				35								
		22	25	30	35	22	25	30	35					
3900						22x25	2.00							
4700						22x30	2.21	25x25	2.19					
5600	22x25	2.08				22x30	2.51	25x25	2.48					
6800	22x30	2.30				22x35	2.60	25x30	2.60	30x25	2.78			
8200	22x35	2.53	25x25	2.50		22x40	3.12	25x35	3.00	30x30	2.96			
10000	22x35	2.86	25x30	2.84		22x45	3.23	25x40	3.23	30x30	3.25			
12000	22x40	3.18	25x35	3.13	30x25	3.18		25x45	3.61	30x35	3.61	35x30	3.62	
15000	22x50	3.67	25x40	3.60	30x30	3.60		25x50	4.30	30x40	4.32	35x30	4.32	
18000			25x45	4.21	30x35	4.19	35x30	4.21			30x45	4.66	35x35	5.14
22000					30x40	4.68	35x35	4.69			30x50	5.74	35x40	5.74
27000					30x45	5.42	35x40	5.42					35x45	6.21
33000							34x45	6.08					35x50	6.35
39000							35x50	6.80						

uF	WV Item	22	25	30	35	22	25	30	35					
		1800					22x25	1.71						
2200	22x25	1.73				22x30	2.11	25x25	2.07					
2700	22x30	1.99				22x35	2.25	25x30	2.24					
3300	22x30	2.17	22x25	2.14		22x40	2.42	25x35	2.41	30x25	2.50			
3900	22x235	2.45	25x30	2.41		22x45	2.79	25x35	2.78	30x30	2.78			
4700	22x40	2.71	25x30	2.73	30x25	2.71		22x50	3.14	25x40	3.03	30x30	3.03	
5600	22x45	3.09	25x35	3.03	30x30	3.09			25x45	3.42	30x35	3.43	35x30	3.38
6800	22x50	3.55	25x40	3.48	30x30	3.48			25x50	3.96	30x40	3.97	35x35	3.90
8200			25x45	3.71	30x35	3.75	35x30	3.75			30x45	4.41	35x35	4.40
10000			25x50	4.20	30x40	4.27	35x30	4.18			30x50	4.66	35x40	4.64
12000					30x45	4.48	35x35	4.48					35x50	5.04
15000							35x40	5.15						
18000							35x50	5.36						

uF	WV Item	80				100								
		22	25	30	35	22	25	30	35					
820						22x25	1.48							
1000						22x30	1.61	25x25	1.61					
1200	22x25	1.59				22x35	1.70	25x30	1.68					
1500	22x30	1.71				22x40	1.96	25x35	1.94	30x30	1.94			
1800	22x35	1.80	25x25	1.81		22x45	2.22	25x40	2.22	30x30	2.15			
2200	22x40	2.27	25x30	2.27	30x25	2.24		22x50	2.65	25x40	2.72	30x35	2.63	
2700	22x45	2.64	25x35	2.64	30x30	2.62			25x50	3.06	30x40	3.05	35x35	3.09
3300	22x50	2.93	25x40	2.93	30x30	2.91					30x45	3.45	35x35	3.45
3900			25x45	3.26	30x35	3.26					30x50	3.68	35x40	3.68
4700			25x50	3.64	30x40	3.53	35x30	3.49					35x45	3.92
5600					30x45	3.87	35x35	3.84					35x50	4.10
6800					30x50	4.44	35x40	4.40						
8200							35x45	4.95						

Case Size DxL(mm) ↑ ↑ Max Ripple Current A (ms)/120Hz 85°C

■ DIMENSIONS

D x L (mm)

uF	WV Item	160				200								
		22	25	30	35	22	25	30	35					
270						22x25	1.24							
330	22x25	1.45				22x30	1.41	25x25	1.36					
390	22x30	1.55	25x25	1.57		22x30	1.57	25x25	1.55					
470	22x30	1.77	25x25	1.77		22x40	1.79	25x30	1.75	30x25	1.76			
560	22x35	1.94	25x30	1.94	30x25	1.95	22x40	1.98	25x35	1.95	30x30	1.95		
680	22x40	2.13	25x35	2.15	30x25	2.15	22x45	2.24	25x40	2.22	30x30	2.18		
820	22x50	2.42	25x40	2.40	30x30	2.40			25x45	2.55	30x35	2.53	35x30	2.49
1000			25x45	2.74	30x35	2.72	35x30	2.68	25x50	2.96	30x40	2.94	35x30	2.90
1200			25x50	3.10	30x40	3.08	35x30	3.07			30x45	3.27	35x35	3.22
1500					30x45	3.58	35x35	3.52					35x45	3.73
1800					30x50	4.15	35x40	4.15					35x50	4.15
2200							35x45	4.50						

uF	WV Item	250				350								
		22	25	30	35	22	25	30	35					
100						22x25	0.73							
120						22x25	0.86							
150	22x25	0.94				22x30	1.08	25x25	1.10					
180	22x5	1.08				22x35	1.21	25x30	1.23					
220	22x30	1.14	25x25	1.12		22x40	1.33	25x35	1.36	30x25	1.37			
270	22x33	1.28	25x25	1.36		22x45	1.54	25x40	1.57	30x30	1.62	35x25	1.84	
330	22x35	1.52	25x30	1.50	30x25	1.45		25x45	1.69	30x35	1.79	35x30	2.07	
390	22x40	1.74	25x35	1.70	30x25	1.70		25x50	1.94	30x40	2.02	35x35	2.30	
470	22x45	1.95	25x40	1.95	30x30	1.84				30x45	2.28	35x40	2.49	
560			25x45	2.24	30x35	2.12	35x25	2.12		30x50	2.47	35x45	2.85	
680			25x50	2.41	30x40	2.45	35x30	2.45				35x50	3.13	
820					30x45	2.73	35x35	2.72						
1000					30x50	3.22	35x40	3.14						
1200							35x45	3.61						
1500							35x50	3.91						

uF	WV Item	400				450								
		22	25	30	35	22	25	30	35					
47	22x25	0.46				22x25	0.42							
56	22x25	0.58				22x25	0.55							
68	22x25	0.67				22x25	0.64							
82	22x25	0.76				22x30	0.78							
100	22x30	0.89	25x25	1.12		22x35	0.85	25x30	0.87					
120	22x30	0.99	25x25	1.36		22x40	0.97	25x35	0.99	30x25	1.02			
150	22x35	1.12	25x30	1.50	30x25	1.15	22x45	1.06	25x40	1.13	30x30	1.16		
180	22x40	1.27	25x35	1.70	30x25	1.40		25x45	1.26	30x35	1.30	35x30	1.31	
220	22x45	1.43	25x40	1.95	30x30	1.51		25x50	1.43	30x45	1.47	35x30	1.49	
270			25x45	2.24	30x35	1.64	35x30	1.64		30x50	1.71	35x35	1.72	
330			25x50	2.41	30x40	1.85	35x30	1.85			1.91	35x40	1.93	
390					30x45	2.04	35x35	2.06				35x45	2.16	
470					30x50	2.28	35x40	2.30				35x50	2.42	
560							35x45	2.57						
680							35x50	2.80						

■ RIPPLE CURRENT COEFFICIENTS

Temperature(°C)	45	65	85	105
Multiplier	2.40	2.15	1.70	1.00

Frequency	60(50)	120	1K	10K	100K
WV	Multiplier				
47 ~ 330	0.90	1.00	1.05	1.10	1.10
39 ~ 1000	0.90	1.00	1.15	1.20	.120
40 ~ 1000	0.80	1.00	1.35	1.45	1.50
1000 ~ 4700	0.80	1.00	1.10	1.15	1.15