SURFACE MOUNT ALUMINUM ELECTROLYTIC

FV Long Life Series

●Features : 85℃ 3000~5000 hours,Longer life than GV, Low profile vertical chip
●Recommended Applications: Suitable for AV(TV,Video,Audio),Monitor/Computer, OA/HA/Communication
●Corresponding product to RoHS

■ Specifications

Item	Characteristics
Operating Temperature Range	-40 ~ +85℃
Rated Voltage Range (WV)	4 ~ 100VDC
Rated Capacitance Range	1 ~ 1000 μF
Capacitance Tolerance	± 20 % at 120Hz , 20℃
Leakage Current (MAX) (20℃)	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)
Dissipation Factor (MAX) (tan δ) (120Hz ,20℃)	Shown in the table of standard rating

Low Temperature Stability Impedance Ratio (MAX)

WV / Z(120HZ)	4	6.3	10	16	25	35	50	63	100
Z(-25℃) / Z(20℃)	7	4	3	2	2	2	2	2	2
Z(-40℃) / Z(20℃)	15	8	6	4	4	3	3	3	3

Endurance

After applying rated voltage for 3000~5000 hours at 85℃,
the capacitors shall meet the following requirements.

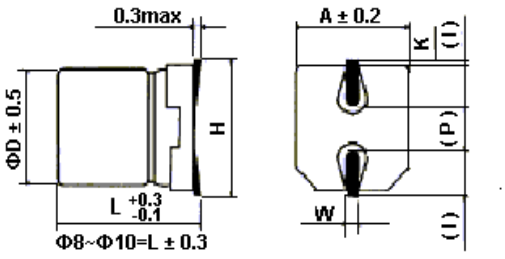
Capacitance Change	Within ±20% of the initial value
Dissipation Factor	Not move than 200% of the specified value
Leakage Current	Not more than the specified value

Case (φ)	Life time (hrs)
φD≦6.3	3000
φD≧8	5000

Shelf Life

After placed at 85℃without voltage applied for 1000 hours,
the capacitor shall meet the same requirement as Endurance.

■ Diagram of Dimensions(mm)



( ) : Reference size

φD	L	A	H	I	W	P	K
4.0	5.4	4.3	5.5 Max	1.8	0.65±0.1	1.0±0.2	0.35 +0.15 -0.20
5.0	5.4	5.3	6.5 Max	2.2	0.65±0.1	1.5±0.2	0.35 +0.15 -0.20
6.3	5.4	6.6	7.8 Max	2.6	0.65±0.1	1.8±0.2	0.35 +0.15 -0.20
8.0	6.2	8.3	9.5 Max	3.4	0.65±0.1	2.2±0.2	0.35 +0.15 -0.20
8.0	10.2	8.3	10.0 Max	3.4	0.90±0.2	3.1±0.2	0.70±0.2
10.0	10.2	10.3	12.0 Max	3.5	0.90±0.2	4.6±0.2	0.70±0.2

■ Multiplier for Ripple Current

Frequency coefficient

Frequency (Hz)	60	120	1K	10K
Coefficient	0.80	1.00	1.15	1.25

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■Dimensions,Max Dissipation Factor,Max Permissible Ripple Current

Capacitance (μF)	Rated (Surge) Voltage											
	4(5)			6.3(8)			10(13)			16(20)		
	Size	tan δ	Ripple	Size	tan δ	Ripple	Size	tan δ	Ripple	Size	tan δ	Ripple
4.7										4x5.4	0.16	20
10										4x5.4	0.16	28
22	4x5.4	0.35	19	4x5.4	0.26	20	4x5.4	0.30	28	4x5.4	0.26	27
										5x5.4	0.16	39
33	4x5.4	0.35	26	5x5.4	0.26	22	4x5.4	0.30	29	5x5.4	0.26	45
							5x5.4	0.20	43	6.3x5.4	0.16	66
47	4x5.4	0.35	34	5x5.4	0.26	46	5x5.4	0.30	43	6.3x5.4	0.16	70
100	5x5.4	0.35	61	6.3x5.4	0.26	71	6.3x5.4	0.26	70	6.3x5.4	0.20	70
220	6.3x5.4	0.35	82	6.3x7.7	0.35	250	6.3x7.7	0.26	250	8x10.2	0.20	280
330				6.3x7.7	0.35	300	8x10.2	0.26	330	10x10.2	0.20	380
470				8x10.2	0.35	380	10x10.2	0.26	400	10x10.2	0.20	420
1000				10x10.2	0.35	700	10x10.2	0.26	580			

Capacitance (μF)	Rated (Surge) Voltage								
	25(32)			35(44)			50(63)		
	Size	tan δ	Ripple	Size	tan δ	Ripple	Size	tan δ	Ripple
1							4x5.4	0.12	10
2.2				4x5.4	0.12	8	4x5.4	0.12	16
3.3				4x5.4	0.12	10	4x5.4	0.12	16
4.7	4x5.4	0.14	22	4x5.4	0.12	22	5x5.4	0.12	23
10	4x5.4	0.20	24	4x5.4	0.16	24	6.3x5.4	0.12	35
	5x5.4	0.14	28	5x5.4	0.12	30			
22	6.3x5.4	0.14	55	6.3x5.4	0.12	60	6.3x7.7	0.12	110
33	6.3x5.4	0.14	65	6.3x7.7	0.14	130	8x10.2	0.12	120
47	6.3x5.4	0.20	70	6.3x7.7	0.14	165	10x10.2	0.12	130
	6.3x7.7	0.16	96						
100	8x10.2	0.16	180	10x10.2	0.14	210	10x10.2	0.12	190
220	10x10.2	0.16	310	10x10.2	0.14	310			

Capacitance (μF)	Rated (Surge) Voltage					
	63(79)			100(125)		
	Size	tan δ	Ripple	Size	tan δ	Ripple
3.3				8x10.2	0.18	30
4.7	8x10.2	0.18	25	8x10.2	0.18	80
10	8x10.2	0.18	25	8x10.2	0.18	85
22	8x10.2	0.18	45	10x10.2	0.18	85
33	10x10.2	0.18	45	10x10.2	0.18	90
47	10x10.2	0.18	55			

☆Size:D φ x L(mm).☆tan δ :20℃,120Hz.☆Ripple Current: 85℃,120Hz,(mA/rms).