

# SURFACE MOUNT ALUMINUM ELECTROLYTIC

**YV**

Low Impedance  
Series

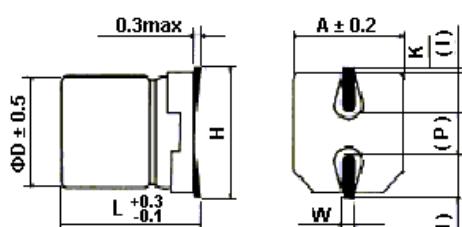
- Features : 105°C 1000~2000 hours , Wide temperature range, Low profile vertical chip, Low impedance
- Recommended Applications: Suitable for AV(TV, Video, Audio), Monitor/Computer, Battery charger, DC/DC converter, SMPS, Noise filter
- Corresponding product to RoHS



## ■ Specifications

Item	Characteristics						
Operating Temperature Range	-55 ~ +105°C						
Rated Voltage Range (WV)	6.3 ~ 50VDC						
Capacitance Range	0.1 ~ 1500 μF						
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)						
Dissipation Factor (MAX) (tan δ) (120Hz ,20°C)	Shown in the table of standard rating						
Low Temperature Stability Impedance Ratio (MAX)	WV Z(120Hz)	6.3	10	16	25	35	50
	Z(-25°C) / Z(20°C)	2	2	2	2	2	2
	Z(-40°C) / Z(20°C)	4	4	3	3	3	3
Endurance	After applying rated voltage with rated ripple current for 1000~2000hrs at 105°C, the capacitors shall meet the following requirements.						
	Capacitance Change	6.3VF Within ±30% of the initial value, 10-50VFWWithin ±20% of the initial value					
	Dissipation Factor	Not more than 200% of the specified value					
	Leakage Current	Not more than the specified value					
	DΦ	4x5.4~6.3x7.7			8x10.2~10x10.2		
	Life	1000hrs			2000hrs		
Shelf Life	After placed at 105°C without voltage applied for 1000 hours, the capacitor shall meet the same requirement as Endurance.						

## ■ Diagram of Dimensions(mm)



( ) : Reference size

φ D	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±0.20
10.0	10.2	10.3	12.0 Max	3.5	0.90±0.2	4.6±0.2	0.70±0.20

## ■ Multiplier for Ripple Current

Frequency coefficient

Frequency (Hz)	120	1K	10K	100K
Coefficient	0.7	0.8	0.9	1.0

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## Dimensions, Max Permissible Ripple Current, Max Impedance

Capacitance ( $\mu$ F)	Rated (Surge) Voltage											
	6.3(8)				10(13)				16(20)			
	Size	$\tan \delta$	Ripple	Z	Size	$\tan \delta$	Ripple	Z	Size	$\tan \delta$	Ripple	Z
10									4x5.4	0.16	60	3.0
22	4x5.4	0.26	60	3.0	5x5.4	0.22	95	1.8	5x5.4	0.16	95	1.8
33	5x5.4	0.26	95	1.8	5x5.4	0.22	95	1.8	6.3x5.4	0.16	140	1.0
47	5x5.4	0.26	95	1.8	6.3x5.4	0.22	140	1.0	6.3x5.4	0.16	140	1.0
100	6.3x5.4	0.26	140	1.0	6.3x5.4	0.22	140	1.0	6.3x5.4	0.16	140	1.0
220	6.3x5.4	0.26	140	1.0	6.3x7.7	0.22	280	0.34	6.3x7.7	0.16	280	0.34
330	6.3x7.7	0.26	280	0.34	8x10.2	0.26	450	0.3	8x10.2	0.20	450	0.3
470	8x10.2	0.35	450	0.3	8x10.2	0.26	450	0.3	8x10.2	0.20	450	0.3
680	8x10.2	0.35	450	0.3	10x10.2	0.26	670	0.15	10x10.2	0.20	670	0.15
1000	8x10.2	0.35	450	0.3	10x10.2	0.26	670	0.15				
1500	10x10.2	0.35	670	0.15								

Capacitance ( $\mu$ F)	Rated (Surge) Voltage											
	25(32)				35(44)				50(63)			
	Size	$\tan \delta$	Ripple	Z	Size	$\tan \delta$	Ripple	Z	Size	$\tan \delta$	Ripple	Z
1									4x5.4	0.12	30	5.0
2.2									4x5.4	0.12	30	5.0
3.3									4x5.4	0.12	30	5.0
4.7					4x5.4	0.12	60	3.0	5x5.4	0.12	50	3.0
10	5x5.4	0.14	95	1.8	5x5.4	0.12	95	1.8	6.3x5.4	0.12	70	2.0
22	6.3x5.4	0.14	140	1.0	6.3x5.4	0.12	140	1.0	6.3x5.4	0.12	70	2.0
33	6.3x5.4	0.14	140	1.0	6.3x5.4	0.12	140	1.0	6.3x7.7	0.12	170	1.3
47	6.3x5.4	0.14	140	1.0	6.3x5.4	0.12	140	1.0	6.3x7.7	0.12	170	1.3
68	6.3x7.7	0.14	280	0.34	6.3x7.7	0.12	280	0.34	8x10.2	0.12	300	0.6
100	6.3x7.7	0.14	280	0.34	8x10.2	0.14	450	0.3	8x10.2	0.12	300	0.6
220	8x10.2	0.16	450	0.3	8x10.2	0.14	450	0.3	10x10.2	0.12	500	0.34
330	8x10.2	0.16	450	0.3	10x10.2	0.14	670	0.15				
470	10x10.2	0.16	670	0.15								

☆Size:D  $\phi$  x L(mm)☆Ripple Current: 105°C, 100KHz,(mA/rms)☆Impedance: 20°C, 100KHz,Z( $\Omega$ ).