

## VS Chip Type Aluminum Electrolytic Capacitors

### Features

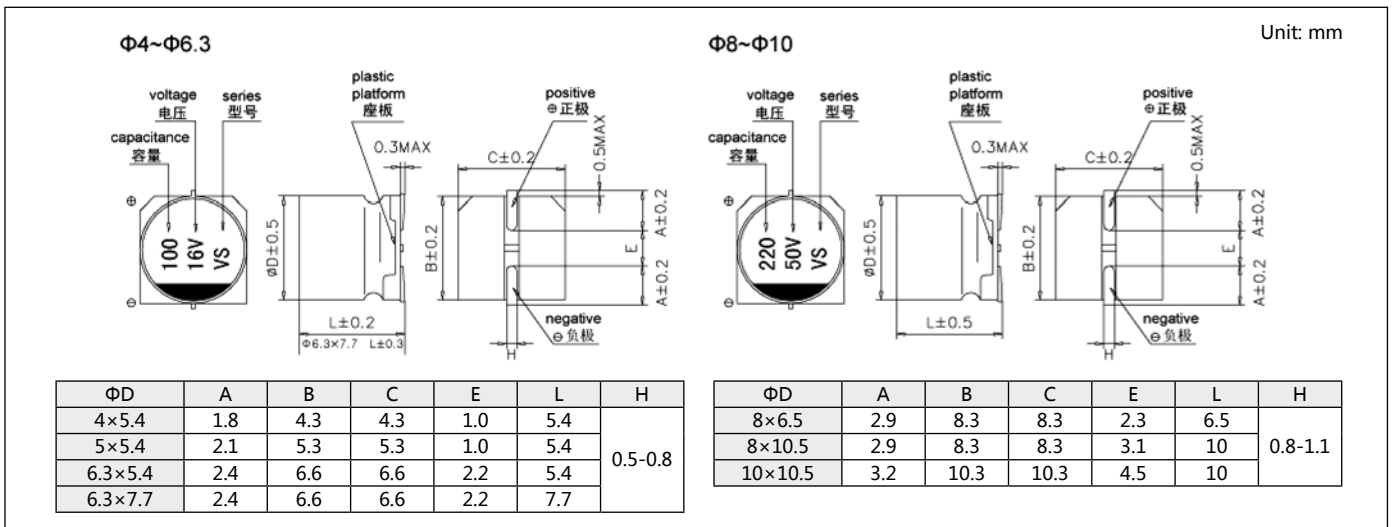
- Case diameter: Φ4mm-Φ10mm.
- Reflow soldering is available.
- Available for high density surface mounting.
- Adapted to the RoHS directive.



### Specifications

Item	Performance Characteristics									
Operating Temperature Range	-40 ~ +85°C									
Rated Voltage Range	4~100V									
Nominal Capacitance Range	0.1~1500μF									
Nominal Capacitance Tolerance	±20%(+20°C ,120Hz)									
Leakage Current	$I \leq 0.01C_R U_R$ or 3(μA), Whichever is greater (at 20°C , after 2 minutes) $C_R$ : Nominal capacitance(μF), $U_R$ : Rated voltage(V)									
Dissipation Factor(Max) (tgδ,+20°C,120Hz)	$U_R$ (V)	4	6.3	10	16	25	35	50	63	100
	tgδ	0.35	0.28	0.24	0.20	0.16	0.14	0.12	0.12	0.10
Load Life	After 2000 hours' application of rated voltage at 85°C , the capacitor shall meet the following requirement:									
	Capacitance change	Within ±20% of the initial value( ≤ 16V: within ±25% of the initial value)								
	Dissipation factor	Not more than 200% of the initial specified value								
Shelf Life	After storage for 1000 hours at 85°C ,the capacitors shall meet the requirement of load life above.									
	$U_R$ (V)	4	6.3	10	16	25	35	50	63	100
		Z-25°C /+20°C	<φ8	7	4	3	2	2	2	2
Low Temperature Stability Impedance Ratio(120Hz)	>= φ8	7	5	4	3	2	2	2	2	2
	Z-40°C /+20°C	<φ8	15	8	8	4	4	3	3	3
>= φ8	15	10	8	6	4	3	3	3	3	
Resistance to Soldering Heat	The capacitors shall be kept on the hot plate maintained at 250°C for 30 seconds. After removing from the hot plate and restored at room temperature, they meet the following requirement:									
	Capacitance change	Within ±10% of the initial value								
	Dissipation factor	Not more than the initial specified value								
	Leakage current	Not more than the initial specified value								

### Diagram of Dimensions



## Nominal capacitance, rated voltage, rated ripple current and case size table

V Item Cap.(µF)	4		6.3		10		16		25		35		50		63		100	
	ΦD×L (mm)	I~ (mA)	ΦD×L (mm)	I~ (mA)	ΦD×L (mm)	I~ (mA)	ΦD×L (mm)	I~ (mA)	ΦD×L (mm)	I~ (mA)	ΦD×L (mm)	I~ (mA)	ΦD×L (mm)	I~ (mA)	ΦD×L (mm)	I~ (mA)	ΦD×L (mm)	I~ (mA)
0.1													4×5.4	3.2				
0.22													4×5.4	4.7				
0.33													4×5.4	5.7				
0.47													4×5.4	6.8				
1.0													4×5.4	10				
2.2													4×5.4	15				
3.3													4×5.4	18				
4.7									4×5.4	22	4×5.4	20	4×5.4	24				
													5×5.4	25				
10							4×5.4	26	4×5.4	24	4×5.4	24	5×5.4	41			8×6.5	40
													5×5.4	32	5×5.4	34	6.3×5.4	43
22			4×5.4	31	4×5.4	30	4×5.4	30	5×5.4	38	5×5.4	39	6.3×5.4	71	8×6.5	96	8×10.5	77
													5×5.4	39				
			5×5.4	39	5×5.4	39	5×5.4	44	6.3×5.4	55	6.3×5.4	59	6.3×5.4	59				
33	4×5.4	31	4×5.4	31	4×5.4	34	5×5.4	44	5×5.4	46	6.3×5.4	65	6.3×7.7	94	8×10.5	117	8×10.5	100
			5×5.4	44	5×5.4	48	6.3×5.4	63	6.3×5.4	67								
47	4×5.4	37	4×5.4	40	5×5.4	47	5×5.4	52	6.3×5.4	70	6.3×7.7	94	6.3×7.7	105	10×10.5	140	10×10.5	130
			5×5.4	52	6.3×5.4	67	6.3×5.4	75					8×10.5	140				
			6.3×5.4	89	6.3×5.4	98												
100	5×5.4	63	5×5.4	47	5×5.4	54	6.3×5.4	103	6.3×7.7	143	6.3×7.7	132	8×10.5	200				
			6.3×5.4	89	6.3×5.4	98						8×10.5	175	10×10.5	250			
220	6.3×5.4	110	6.3×5.4	91	6.3×7.7	173	6.3×7.7	162	8×10.5	230	8×10.5	200	10×10.5	310				
					8×6.5	250	8×10.5	280	8×10.5	310	10×10.5	310						
330			6.3×7.7	188	8×10.5	390	8×10.5	320	8×10.5	270	10×10.5	360						
470			8×10.5	380	8×10.5	390	8×10.5	350	10×10.5	380								
1000			8×10.5	370	8×10.5	580												
			10×10.5	700														
1500			10×10.5	750														

I~ =Rated ripple current (mA)(+85° C ,120Hz)

## Frequency coefficient of ripple current

Frequency(Hz)	50Hz	120Hz	300Hz	1kHz	10K~100KHz
Coefficient	0.70	1.00	1.17	1.36	1.50