VE Series

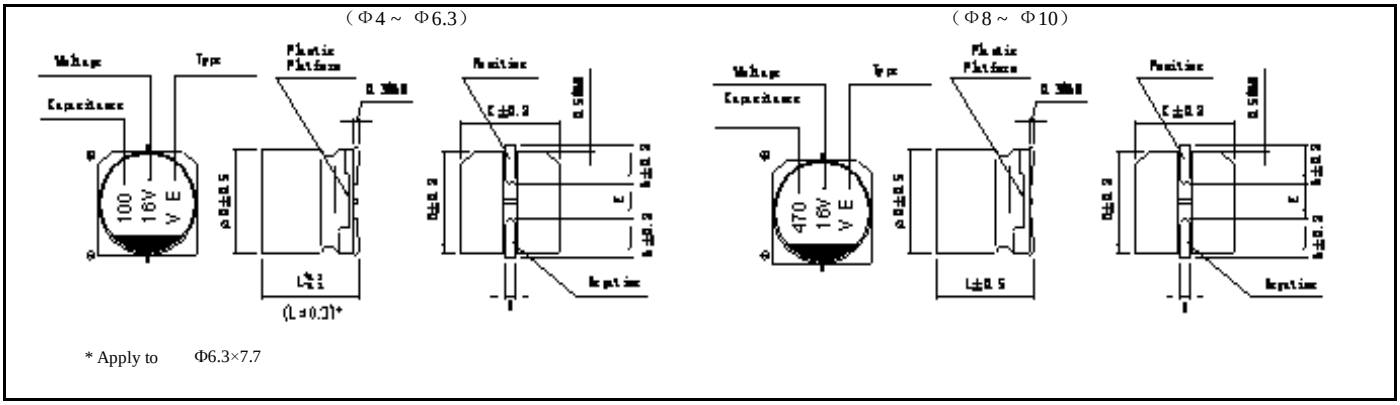
Features

- Case diameter: Φ 4mm～Φ 10mm，5000 hours at 85°C .
- Chip Type Aluminum Electrolytic Capacitors .
- Reflow soldering is available .
- Available for high density surface mounting .
- RoHS Compliant .

Specifications

Item	Performance Characteristics									
Temperature Range	-40℃ ~ 85℃									
Rated Voltage Range	4V ~ 100Vdc									
Capacitance Range	1.0 ~ 1500μF									
Capacitance Tolerance	±20%（20℃，120Hz）									
Leakage Current **（+20℃,max.）**	I≤0.01$C_R U_R$ or 3(μA) Whichever is greater(at 20℃, After 2 minutes) C_R: Nominal Capacitance (μF)　　U_R: Rated voltages (V)									
Dissipation Factor (Max) **（tgδ）20℃, 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
Endurance	After 5000 hours' application of rated voltage at 85℃, 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								
	Leakage Current	Not more than the initial specified value								
Shelf Life	After storage for 1000 hours at +85℃, the capacitors shall meet the requirement of load life above									
Low Temperature Stability Impedance Ratio (120Hz)	U_R (V)		4	6.3	10	16	25	35	50	63	100
	Z(-25℃)/Z(+20℃)	＜Φ8	7	4	3	2	2	2	2	2	2
		≥Φ8	7	5	4	3	2	2	2	2	2
	Z(-40℃)/Z(+20℃)	＜Φ8	15	8	8	4	4	3	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℃ 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



(mm)

	4 × 5.4	5 × 5.4	6.3 × 5.4	6.3 × 7.7	8× 10.5	10 × 10.5
A	1.8	2.1	2.4	2.4	2.9	3.2
B	4.3	5.3	6.6	6.6	8.3	10.3
C	4.3	5.3	6.6	6.6	8.3	10.3
E	1.0	1.3	2.2	2.2	3.1	4.5
L	5.4	5.4	5.4	7.7	10	10
H	0.5 ~ 0.8				0.8 ~ 1.1	

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

Voltage	4		6.3		10		16		25		35		50		63		100	
Cap(μF)	Case Size	I~ mA	Case Size	I~ mA	Case Size	I~ mA	Case Size	I~ mA	Case Size	I~ mA	Case Size	I~ mA	Case Size	I~ mA	Case Size	I~ mA	Case Size	I~ mA
1.0													4×5.4	8.4	4×5.4	10		
2.2													4×5.4	13	4×5.4	15		
3.3													4×5.4	17	4×5.4	20	6.3×7.7	28
4.7									4×5.4	16	4×5.4	18	4×5.4	18	4×5.4	23	6.3×7.7	35
10							4×5.4	23	4×5.4	24	4×5.4	24	5×5.4	30	6.3×5.4	34	6.3×7.7	50
									5×5.4	27	5×5.4	29	6.3×5.4	33				
22			4×5.4	28	4×5.4	30	4×5.4	30	5×5.4	38	5×5.4	39	6.3×5.4	43	6.3×7.7	70	8×10.5	120
					5×5.4	33	5×5.4	37	6.3×5.4	42	6.3×5.4	46						
33	4×5.4	28	4×5.4	34	4×5.4	34	5×5.4	44	5×5.4	46	6.3×5.4	53	6.3×7.7	85	8×10.5	160	10×10.5	190
			5×5.4	37	5×5.4	41	6.3×5.4	49	6.3×5.4	52								
47	4×5.4	33	4×5.4	40	5×5.4	47	5×5.4	52	6.3×5.4	60	6.3×7.7	70	6.3×7.7	90	8×10.5	170		
			5×5.4	45	6.3×5.4	52	6.3×5.4	58					8×10.5	140				
100	5×5.4	50	5×5.4	50	5×5.4	54	6.3×5.4	86	6.3×7.7	130	6.3×7.7	120	8×10.5	181	8×10.5	280		
			6.3×5.4	70	6.3×5.4	76					8×10.5	175	10×10.5	195				
220	6.3×5.4	90	6.3×7.7	95	6.3×7.7	150	6.3×7.7	150	8×10.5	232	8×10.5	246	10×10.5	289				
330	6.3×7.7	152	6.3×7.7	160	8×10.5	240	8×10.5	270	8×10.5	284	10×10.5	324						
470	6.3×7.7	200	8×10.5	265	8×10.5	290	8×10.5	307	10×10.5	393								
680	8×10.5	284	8×10.5	318	10×10.5	374	10×10.5	396										
1000	8×10.5	344	8×10.5	372	10×10.5	454												
1500	10×10.5	347	10×10.5	489														

Max Allowable Ripple Current (mA, rms) at 85℃ 120Hz, Case Size ΦD×L(mm).

Above size is the standard size for our product. If you need special size please contact our sales offices .

Frequency coefficient of ripple current

Frequency	50Hz	120Hz	300Hz	1KHz	≥ 10KHz
Coefficient	0.70	1.00	1.17	1.36	1.50