

VL Chip Type Aluminum Electrolytic Capacitors

Features

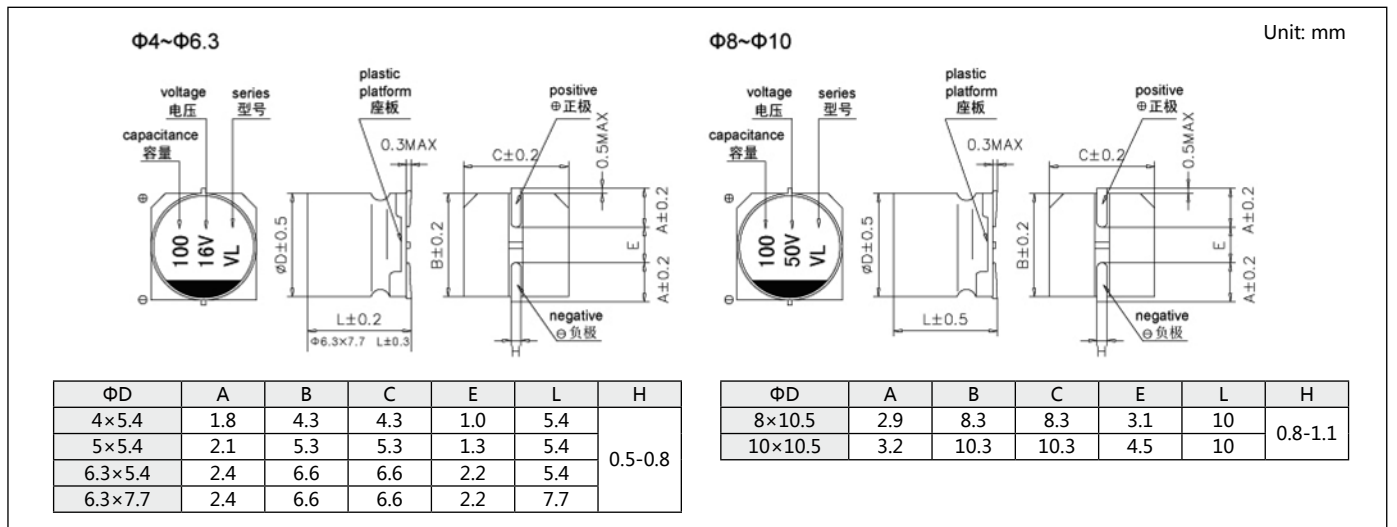
- Load life of 5000 hours at +105°C .
- Reflow soldering is available.
- Available for high density surface mounting.
- Adapted to the RoHS directive.



Specifications

Item	Performance Characteristics						
Operating Temperature Range	-40°C ~ +105°C						
Rated Voltage Range	6.3~50V						
Nominal Capacitance Range	0.1~1000μF						
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)	6.3	10	16	25	35	50
	tgδ	0.32	0.24	0.20	0.16	0.13	0.12
Load Life	After 5000 hours(2000 hours for ΦD=4,5 and 6.3) application of rated voltage at 105°C , the capacitor shall meet the following requirement:						
	Capacitance change	Within ±30% of the initial value					
	Dissipation factor	Not more than 300% of the initial specified value					
	Leakage current	Not more than the initial specified value					
Shelf Life	After storage for 1000 hours at 105°C , the capacitors shall meet the requirement of load life above.						
Low Temperature Stability Impedance Ratio(120Hz)	U _R (V)	6.3	10	16	25	35	50
	Z-25°C /+20°C	4	3	2	2	2	2
	Z-40°C /+20°C	10	7	5	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)	6.3		10		16		25		35		50	
	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	2.4
0.22											4×5.4	3.5
0.33											4×5.4	4.3
0.47											4×5.4	5.1
1.0											4×5.4	7.4
2.2											4×5.4	11
3.3											4×5.4	14
4.7									4×5.4	15	5×5.4	19
10					4×5.4	19	5×5.4	25	5×5.4	25	6.3×5.4	32
22			5×5.4	30	5×5.4	33	6.3×5.4	42	6.3×5.4	45	6.3×7.7	49
33	5×5.4	35	5×5.4	38	6.3×5.4	48	6.3×5.4	48	6.3×7.7	57	8×10.5	77
47	5×5.4	42	6.3×5.4	52	6.3×5.4	57	6.3×7.7	63	8×10.5	92	10×10.5	92
100	6.3×5.4	67	6.3×5.4	72	6.3×7.7	81	8×10.5	130	10×10.5	151	10×10.5	94
220	6.3×7.7	101	8×10.5	160	10×10.5	220	10×10.5	216	10×10.5	216		
330	8×10.5	230	10×10.5	238	10×10.5	238	10×10.5	238				
470	10×10.5	340	10×10.5	340	10×10.5	340						
1000	10×10.5	340										

I~ =Rated ripple current (mA)(+105° C ,120Hz)

Frequency coefficient of ripple current

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