SMD Aluminum Electrolytic Capacitors VLV

Features

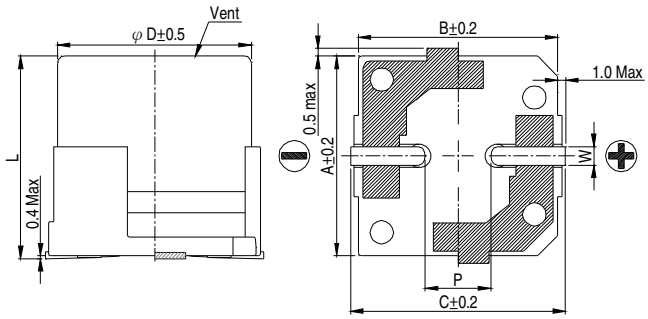
- 12.5 ~ 16φ, 105℃, 5,000 hours assured
- Suitable for automotive application
- Peak acceleration: 50G
- RoHS Compliance

Marking color: Black

SPECIFICATIONS

Items	Performance
Category Temperature Range	-55 ~ +105℃
Capacitance Tolerance	±20% (at 120Hz, 20℃)
Leakage Current (at 20℃)	I = 0.01CV or 3 (μA) whichever is greater (after 2 minutes) Where, C = rated capacitance in μF V = rated DC working voltage in V
Dissipation Factor (Tan δ at 120Hz, 20℃)	Rated Voltage: 6.3 / 10 / 16 / 25 / 35 / 50 / 63 / 80 / 100 Tan δ (max): 0.30 / 0.26 / 0.22 / 0.16 / 0.13 / 0.10 / 0.08 / 0.08 / 0.07 When the capacitance exceeds 1,000 μF, 0.002 shall be added every 1,000 μF increase.
Low Temperature Characteristics (at 120Hz)	Impedance ratio shall not exceed the values given in the table below. Rated Voltage: 6.3 / 10 / 16 / 25 / 35 / 50 / 63 / 80 / 100 Impedance Ratio Z(-25℃)/Z(+20℃): 4 / 3 / 2 / 2 / 2 / 2 / 2 / 2 / 2 Impedance Ratio Z(-55℃)/Z(+20℃): 8 / 5 / 4 / 3 / 3 / 3 / 3 / 3 / 3
Endurance	Test Time: 5,000 Hrs Capacitance Change: Within ±30% of initial value Dissipation Factor: Less than 300% of specified value Leakage Current: Within specified value * The above specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage applied for 5,000 hours at 105℃.
Shelf Life Test	Test Time: 1,000 Hrs Capacitance Change: Within ±30% of initial value Dissipation Factor: Less than 300% of specified value Leakage Current: Within specified value * The above specifications shall be satisfied when the capacitors are restored to 20℃ after exposing them for 1,000 hours at 105℃ without voltage applied.
Ripple Current & Frequency Multipliers	Frequency(Hz): 50, 60 / 120 / 1k / 10k up Multiplier: 0.60 / 0.70 / 0.85 / 1.0
Vibration	Peak acceleration: 50G Peak to peak amplitude: 1.5mm Frequency: 5 to 2,000 Hz reciprocation for 20 min. Direction and duration of vibration: 3 orthogonal directions mutually each for 4 Hrs.

DIAGRAM OF DIMENSIONS

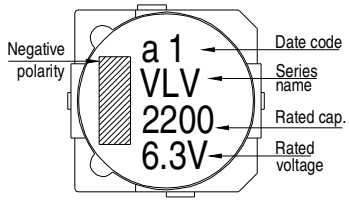


LEAD SPACING AND DIAMETER Unit: mm

φD	L	A	B	C	W	P ± 0.2
12.5	13.5 ± 0.5	13.0	13.4	15.4	1.1 ~ 1.4	4.4
12.5	16 ± 0.5	13.0	13.4	15.4	1.1 ~ 1.4	4.4
16	16.5 ± 0.5	16.5	16.9	18.9	1.1 ~ 1.4	6.4

MARKING

ϕD ≧ 12.5mm



Dimension: ϕD × L(mm)
Ripple Current: mA/rms at 100k Hz, 105°C
Impedance: Ω/ at 100k Hz, 20℃

DIMENSION & PERMISSIBLE RIPPLE CURRENT

V. DC / μF	Contents	6.3V (0J)			10V (1A)			16V (1C)			25V (1E)			35V (1V)			50V (1H)		
		ϕD×L	Imp.	mA	ϕD×L	Imp.	mA	ϕD×L	Imp.	mA	ϕD×L	Imp.	mA	ϕD×L	Imp.	mA	ϕD×L	Imp.	mA
330	331													12.5×13.5	0.066	850	12.5×13.5	0.11	700
470	471													12.5×16	0.058	950	16×16.5	0.070	1,100
680	681										12.5×13.5	0.066	850	12.5×16	0.058	950	16×16.5	0.070	1,100
1,000	102							12.5×13.5	0.066	850	12.5×16	0.058	950	16×16.5	0.052	1,300			
1,500	152				12.5×13.5	0.066	850	12.5×16	0.058	950	16×16.5	0.052	1,300						
2,200	222	12.5×13.5	0.066	850	12.5×16	0.058	950	16×16.5	0.052	1,300	16×16.5	0.052	1,300						
3,300	332	12.5×16	0.058	950	16×16.5	0.052	1,300	16×16.5	0.052	1,300									
4,700	472	16×16.5	0.052	1,300	16×16.5	0.052	1,300												

V. DC / μF	Contents	63V (1J)			80V (1K)			100V (2A)		
		ϕD×L	Imp.	mA	ϕD×L	Imp.	mA	ϕD×L	Imp.	mA
100	101							12.5×13.5	0.32	450
150	151	12.5×13.5	0.140	700	12.5×13.5	0.32	450	12.5×16	0.26	550
220	221	12.5×13.5	0.140	700	12.5×16	0.26	550	16×16.5	0.17	650
330	331	16×16.5	0.080	900	16×16.5	0.17	650			
470	471	16×16.5	0.080	900						