SMD Aluminum Electrolytic Capacitors VES

Features

- 4 ~ 6.3 ϕ, 105℃, 1,000 hours assured
- Vertical chip type miniaturized for 5.5mm high capacitor
- Designed for surface mounting on high density PC board
- 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℃)	
Low Temperature Characteristics (at 120Hz)	Impedance ratio shall not exceed the values given in the table below.
Endurance	
Shelf Life Test	
Ripple Current & Frequency Multipliers	

Dissipation Factor (Tan δ at 120Hz, 20℃)

Rated Voltage	6.3	10	16	25	35	50
Tan δ (max)	0.30	0.26	0.22	0.16	0.13	0.12

Low Temperature Characteristics (at 120Hz)

Rated Voltage		6.3	10	16	25	35	50
Impedance Ratio	Z(-25℃)/Z(+20℃)	4	3	2	2	2	2
	Z(-55℃)/Z(+20℃)	8	5	4	3	3	3

Endurance

Test Time	1,000 Hrs
Capacitance Change	Within ±20% of initial value
Dissipation Factor	Less than 200% 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 1,000 hours at 105℃.

Shelf Life Test

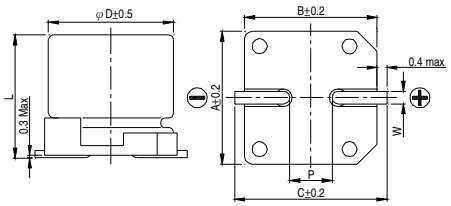
Test Time	1,000 Hrs
Capacitance Change	Within ±20% of initial value
Dissipation Factor	Less than 200% of specified value
Leakage Current	Within specified value

* 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	120	1k	10k up
Multiplier	0.7	1.0	1.3	1.4

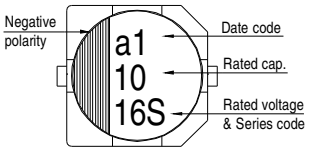
DIAGRAM OF DIMENSIONS



LEAD SPACING AND DIAMETER Unit: mm

φD	L	A	B	C	W	P ± 0.2
4	5.3 ± 0.2	4.3	4.3	5.1	0.5 ~ 0.8	1.0
5	5.3 ± 0.2	5.3	5.3	6.1	0.5 ~ 0.8	1.5
6.3	5.3 ± 0.2	6.6	6.6	7.4	0.5 ~ 0.8	2.0

MARKING



2011 Verison

DIMENSION & PERMISSIBLE RIPPLE CURRENT

Dimension: ϕD × L(mm)
Ripple Current: mA/rms at 120 Hz, 105°C

V. DC / μF	Contents	6.3V (0J)		10V (1A)		16V (1C)		25V (1E)		35V (1V)		50V (1H)	
		ϕD×L	mA	ϕD×L	mA	ϕD×L	mA	ϕD×L	mA	ϕD×L	mA	ϕD×L	mA
0.1	0R1											4×5.3	2
0.22	R22											4×5.3	3
0.33	R33											4×5.3	4
0.47	R47											4×5.3	5
1	010											4×5.3	7
2.2	2R2											4×5.3	10
3.3	3R3											4×5.3	12
4.7	4R7							4×5.3	12	4×5.3	14	5×5.3	17
10	100			4×5.3	15	4×5.3	16	5×5.3	21	5×5.3	23	6.3×5.3	26
22	220	4×5.3	21	5×5.3	25	5×5.3	28	6.3×5.3	36	6.3×5.3	50	6.3×5.3	51
33	330	5×5.3	30	5×5.3	31	6.3×5.3	40	6.3×5.3	44				
47	470	5×5.3	36	6.3×5.3	43	6.3×5.3	47	6.3×5.3	60				
100	101	6.3×5.3	61	6.3×5.3	65	6.3×5.3	70						