Cal-Chip Electronics Inc. SMD Aluminum Electrolytic Capacitors CVB

Features

- 4 ~ 6.3φ, 85℃, 2,000 hours assured
- Vertical chip type miniaturized
- Non-polar capacitors for 5.5 mm high capacitors
- Designed for surface mounting on high density PC board.
- RoHS Compliance

SPECIFICATIONS

Items	Performance
Operating Temperature Range	-40℃ ~ +85℃
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)	
Load Life Test (with the polarity inverted every 250 hours)	
Shelf Life Test	Test time: 1,000 hrs; other items are the same as those for the load life test.
Ripple Current & Frequency Multipliers	
Other Standards	JIS C 5101-1, -18

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

Rated Voltage		6.3	10	16	25	35	50
Tan δ (max)	4φ	0.35	0.30	0.25	0.25	0.25	0.25
	5 ~ 6.3φ	0.30	0.25	0.20	0.15	0.15	0.15

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
Impedance Ratio	Z(-25℃)/Z(+20℃)	3	3	2	2	2	2
	Z(-40℃)/Z(+20℃)	8	5	4	3	3	3

Load Life Test (with the polarity inverted every 250 hours):

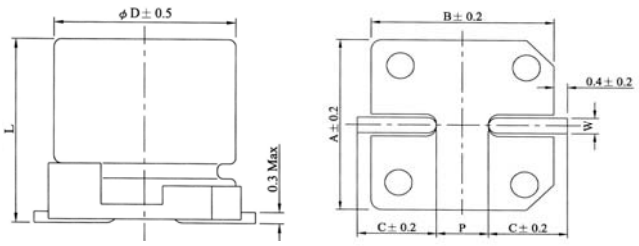
Test Time	2,000 Hrs
Capacitance Change	Within ±20% of initial value
Dissipation Factor	Less than 200% of specified value
Leakage Current	Within specified value

* The above specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage applied for 2,000 hrs at 85℃.

Ripple Current & Frequency Multipliers:

V.DC(V) \ Freq.(Hz)	50	120	1K	10K up
Under 16	0.8	1.0	1.15	1.25
25 ~ 35	0.8	1.0	1.25	1.40
50	0.8	1.0	1.35	1.50

DIAGRAM OF DIMENSIONS



LEAD SPACING AND DIAMETER

Unit: mm

φD	L	A	B	C	W	P
4	5.3±0.2	4.3	4.3	2.0	0.5 to 0.8	1.0
5	5.3±0.2	5.3	5.3	2.3	0.5 to 0.8	1.5
6.3	5.3±0.2	6.6	6.6	2.7	0.5 to 0.8	2.0

Dimension: φD × L(mm)

Ripple Current: mA/rms at 120 Hz, 85°C

DIMENSION & PERMISSIBLE RIPPLE CURRENT

μF	Contents \ V.DC	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	2.3
0.22	R22											4×5.3	3.3
0.33	R33											4×5.3	4.1
0.47	R47											4×5.3	4.9
1	010											4×5.3	7.2
2.2	2R2									4×5.3	10	5×5.3	14
3.3	3R3							4×5.3	13	5×5.3	17	5×5.3	17
4.7	4R7					4×5.3	14	5×5.3	20	5×5.3	21	6.3×5.3	24
10	100			4×5.3	18	5×5.3	26	6.3×5.3	35	6.3×5.3	35		
22	220	5×5.3	27	6.3×5.3	40	6.3×5.3	45						
33	330	6.3×5.3	45	6.3×5.3	50	6.3×5.3	55						
47	470	6.3×5.3	54										