CVK *SMD Aluminum Electrolytic Capacitors* Cal-Chip Electronics Inc.

Features:

- 4 ~ 10 ϕ, 105℃, 2,000 ~ 5,000 hours assured
- Designed for surface mounting on high density PC board.
- RoHS Compliance

SPECIFICATIONS

Items	Performance
Operating 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
4～6.3 ϕ	0.32	0.28	0.24	0.18	0.15	0.14
8～10 ϕ	0.30	0.26	0.22	0.16	0.13	0.12

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

Load Life Test

Test Time		2,000 Hrs(4 ~ 6.3 ϕ)	5,000 Hrs(8 ~ 10 ϕ)
Capacitance Change	6.3V	Within ±30% of initial value	Within ±30% of initial value
	10 ~ 16V	Within ±25% of initial value	Within ±30% of initial value
	25 ~50V	Within ±20% of initial value	Within ±30% of initial value
Dissipation Factor	6.3 ~ 16V	Less than 300% of specified value	Less than 300% of specified value
	25 ~ 50V	Less than 200% of specified value	Less than 300% of specified value
Leakage Current		Within specified value	Within specified value

* The above specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage applied for 2,000/5,000 hrs at 105℃.

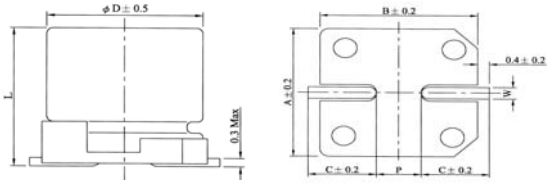
Shelf Life Test: Test time: 1,000 hrs; other items are the same as those for the load life test.

Ripple Current & Frequency Multipliers

Freq.(Hz) / V.DC(V)	50, 60	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 ~ 63	0.8	1.0	1.35	1.50
100	0.7	1.0	1.35	1.50

Standards: Satisfies Characteristic W of JIS C 5101-1, -18

DIAGRAM OF DIMENSIONS



LEAD SPACING AND DIAMETER Unit: mm

φD	L	A	B	C	W	P±0.2
4	5.7±0.3	4.3	4.3	2.0	0.5 to 0.8	1.0
5	5.7±0.3	5.3	5.3	2.3	0.5 to 0.8	1.5
6.3	5.7±0.3	6.3	6.3	2.7	0.5 to 0.8	2.0
8	10±0.5	8.4	8.4	3.0	0.7 to 1.1	3.1
10	10±0.5	10.4	10.4	3.3	0.7 to 1.1	4.7

DIMENSION & PERMISSIBLE RIPPLE CURRENT

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

V.DC / μF	Content	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											4×5.7	2
0.22	R22											4×5.7	3
0.33	R33											4×5.7	4
0.47	R47											4×5.7	5
1	010											4×5.7	10
2.2	2R2											4×5.7	16
3.3	3R3											4×5.7	18
4.7	4R7					4×5.7	13	4×5.7	13	4×5.7	13	5×5.7	22
10	100			4×5.7	13	4×5.7	16	5×5.7	23	5×5.7	25	6.3×5.7	30
22	220	4×5.7	13	5×5.7	30	5×5.7	30	6.3×5.7	38	6.3×5.7	50	8×10	178
33	330	5×5.7	30	5×5.7	30	6.3×5.7	40	6.3×5.7	48	8×10	178	8×10	178
47	470	5×5.7	36	6.3×5.7	43	6.3×5.7	50	8×10	178	8×10	178	8×10	178
100	101	6.3×5.7	61	8×10	178	8×10	178	8×10	178	10×10	324	10×10	160
220	221	8×10	178	8×10	178	8×10	178	8×10	240	10×10	324		
330	331	8×10	178	10×10	324	10×10	324	10×10	324	10x10	324		
470	471	10×10	324	10×10	324	10×10	324						