Cal-Chip Electronics Inc. SMD Aluminum Electrolytic Capacitors CVC

Features

- 4 ~ 6.3 ϕ, 85℃, 2,000 hours assured
- Vertical chip type miniaturized for 5.5mm, high capacitors
- Low Leakage Current Lead free reflow soldering is available.
- 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 = 0.002CV or 0.5 (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
Tan δ (max)	0.28	0.24	0.20	0.14	0.12	0.10

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

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℃.

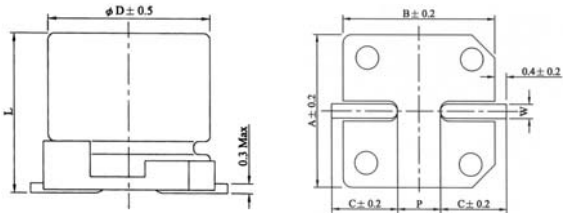
Shelf Life Test: Test time: 1,000 hrs; other items are the same as those for the load life test.

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

Other Standards: JIS C 5101-1, -18

DIAGRAM OF DIMENSIONS



LEAD SPACING AND DIAMETER Unit: mm

ϕD	L	A	B	C	W	P±0.2
4	5.3±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 & PERMISSIBLE RIPPLE CURRENT

Dimension: ϕD × L(mm)
Ripple Current: mA/rms at 120 Hz, 85°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	mA
0.1	0R1											4×5.3	3
0.22	R22											4×5.3	5
0.33	R33											4×5.3	6
0.47	R47											4×5.3	7
1	010											4×5.3	10
2.2	2R2											4×5.3	15
3.3	3R3											4×5.3	19
4.7	4R7							4×5.3	19	4×5.3	20	5×5.3	26
10	100			4×5.3	23	4×5.3	26	5×5.3	32	5×5.3	34	6.3×5.3	44
22	220	4×5.3	31	5×5.3	39	5×5.3	44	6.3×5.3	55	6.3×5.3	59		
33	330	5×5.3	44	5×5.3	48	6.3×5.3	63	6.3×5.3	67				
47	470	5×5.3	52	6.3×5.3	67	6.3×5.3	75						
100	101	6.3×5.3	89	6.3×5.3	98								