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

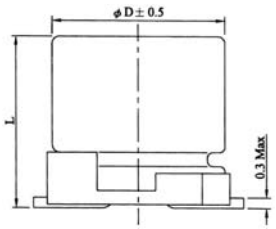
Features

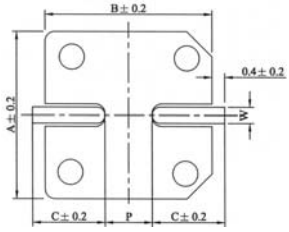
- 4 ~ 10 ϕ, 105℃, 3000 hours assured.
- Long life assured.
- Designed for surface mounting on high density PC board.
- RoHS Compliance

SPECIFICATIONS

Items	Performance
Operating Temperature Range	-40℃ ~ +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 Tan δ (max): 0.30 / 0.24 / 0.20 / 0.16 / 0.13 / 0.12
Low Temperature Characteristics (at 120Hz)	Impedance ratio shall not exceed the values given in the table below. Impedance Ratio Z(-25℃)/Z(+20℃): 4 / 3 / 2 / 2 / 2 / 2 Impedance Ratio Z(-40℃)/Z(+20℃): 10 / 7 / 5 / 3 / 3 / 3
Load Life Test	Test Time: 3,000 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 3,000 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	V.DC(V) \ Freq.(Hz): 50 / 120 / 1K / 10K up 6.3～50: 0.70 / 1.00 / 1.36 / 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	5.7±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	6.6	6.6	2.7	0.5 to 0.8	2.0
6.3	7.7±0.3	6.6	6.6	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

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											4×5.7	1
0.22	R22											4×5.7	2.6
0.33	R33											4×5.7	3.2
0.47	R47											4×5.7	5
1	010											4×5.7	8
2.2	2R2											4×5.7	12
3.3	3R3											4×5.7	17
4.7	4R7									4×5.7	16	5×5.7	22
10	100					4×5.7	18	5×5.7	27	5×5.7	27	6.3×5.7	32
22	220	4×5.7	22	4×5.7	30	5×5.7	30	6.3×5.7	44	6.3×5.7	44	6.3×7.7	58
33	330	5×5.7	35	5×5.7	35	6.3×5.7	48	6.3×5.7	50	6.3×7.7	57	8×10	130
47	470	5×5.7	38	6.3×5.7	50	6.3×5.7	50	6.3×7.7	63	8×10	141	8×10	141
100	101	6.3×5.7	69	6.3×7.7	81	6.3×7.7	81	8×10	141	10×10	290	10×10	310
220	221	6.3×7.7	120	8×10	141	8×10	141	10×10	290	10×10	320		
330	331	8×10	290	10×10	290	10×10	290	10×10	320				
470	471	10×10	320	10×10	320	10×10	320						
1,000	102	10×10	410										