

SMD Aluminum Electrolytic Capacitor – JCL

FEATURES

- Wide temperature range -55~+105°C.
- Load life of 3000~5000 hours.
- Comply with the RoHS directive.



SPECIFICATIONS

Operating Temperature	-55°C ~ +105°C
Voltage Range	6.3V~100V.DC
Capacitance Range	0.1 ~ 1500 μF
Capacitance Tolerance	±20% at 120Hz, 20°C
Leakage Current	Leakage current (Φ4~Φ10) ≤0.01CV or 3μA, whichever is greater (After 2 minutes application of rated voltage) Leakage current (Φ12.5~Φ16) ≤0.03CV or 4μA, whichever is greater (After 1 minutes application of rated voltage)

Dissipation Factor (Tan δ)

Measurement Frequency: 120Hz, Temperature: 20°C

Rated Voltage (V)		6.3	10	16	25	35	50~100
Tan δ (Max.)	Φ4~Φ10	0.28	0.24	0.20	0.16	0.13	0.12
	Φ12.5~Φ16	0.38	0.34	0.30	0.26	0.22	0.18

Stability At Low Temp.

Measurement Frequency: 120Hz

Rated Voltage (V)		6.3	10	16	25	35	50	63	100
Impedance Ratio ZT/Z20 (Max.)	Φ4~Φ10	Z(-25°C)/ Z(20°C)	3	3	2	2	2	2	2
		Z(-55°C)/ Z(20°C)	8	5	4	3	3	3	3
	Φ12.5~Φ16	Z(-25°C)/ Z(20°C)	5	4	3	2	2	2	2
		Z(-55°C)/ Z(20°C)	12	10	8	5	4	3	3

Load Life

After 5000 hrs. (3000 hrs. for Φ4~Φ6.3*5.4&Φ8*6.2) application of the rated voltage at 105°C, They meet the characteristics listed below.

Capacitance Change	Within ±30% of initial value
Dissipation Factor	300% or less of initial specified value
Leakage Current	Initial specified value or less

Shelf Life

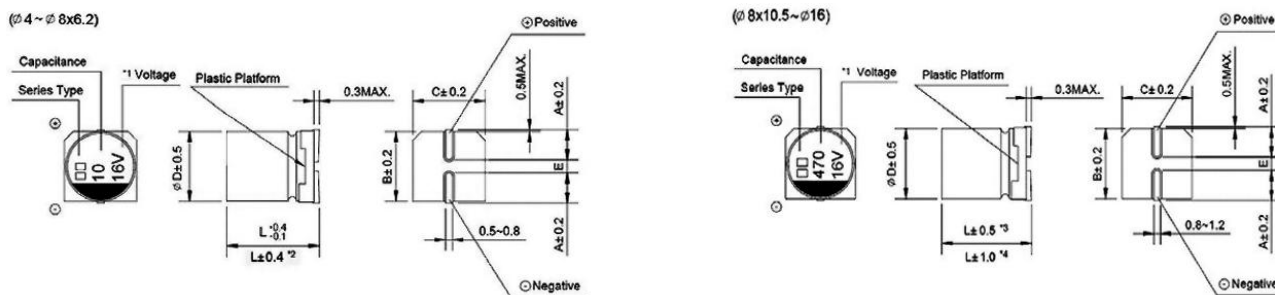
After leaving capacitors under no load at 105°C for 1000 hours, They meet the specified value for load life characteristics listed above.

Resistance to Soldering Heat

After reflow soldering and restored at room temperature, they meet the characteristics listed at right.

Capacitance Change	Within ± 10% of initial value
Dissipation Factor	Initial specified value or less
Leakage Current	Initial specified value or less

DRAWING (Unit: mm)



*1 Voltage mark for 6.3V is [6V]	*2 Applicable to Φ6.3*7.7
*3 Applicable to Φ8*10.5~Φ10	*4 Applicable to Φ12.5~Φ16.

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DIMENSIONS(Unit: mm)

ØD×L	4×5.4	5×5.8	6.3×5.4	6.3×7.7	8×6.2	8×10.5	10×10.5	10×13.5	12.5×13.5/16	16×16.5
A	2.0	2.2	2.6	2.6	3.4	3.0	3.3	3.3	4.9	5.8
B	4.3	5.3	6.6	6.6	8.4	8.4	10.4	10.4	13.0	17.0
C	4.3	5.3	6.6	6.6	8.4	8.4	10.4	10.4	13.0	17.0
E±0.2	1.0	1.4	1.9	1.9	2.3	3.1	4.7	4.7	4.7	6.4
L	5.8	5.8	5.8	7.7	6.2	10.5	10.5	13.5	13.5/16	16.5

DIMENSIONS&MAXIMUM PERMISSIBLE RIPPLE CURRENT

WV		6.3		10		16		25	
Cap. (µF)		0J		1A		1C		1E	
10	100					4×5.4	18	5×5.8	27
22	220	4×5.4	22	5×5.8	30	5×5.8	30	6.3×5.4	44
33	330	5×5.8	35	5×5.8	36	6.3×5.4	48	6.3×5.4	50
47	470	5×5.8	38	6.3×5.4	50	6.3×5.4	50	6.3×7.7	63
								(8×6.2)	(63_
100	101	6.3×5.4	69	6.3×7.7	81	6.3×7.7	81	8×10.5	116
				(8×6.2)	(81)	(8×6.2)	(81)		
150	151	6.3×7.7	85	8×10.5	125	8×10.5	125	10×10.5	320
		(8×6.2)	(85)						
220	221	6.3×7.7	120	8×10.5	141	10×10.5	216	10×10.5	320
		(8×6.2)	(120)						
330	331	8×10.5	290	10×10.5	290	10×10.5	290	10×10.5	320
470	471	10×10.5	320	10×10.5	320	10×10.5	320	12.5×13.5	400
								(10×13.5)	(350)
680	681	10×10.5	320	10×10.5	320	10×13.5	420	12.5×13.5	415
1000	102	10×10.5	410	10×13.5	390	12.5×13.5	550	12.5×13.5	460
1500	152	10×13.5	450	12.5×13.5	480	12.5×13.5	650	12.5×16	700
2200	222	12.5×13.5	680	12.5×16	750	16×16.5	800		
				(12.5×13.5)	(510)				
3300	332	12.5×16	850	16×16.5	800			Case Size	Ripple Current
		(12.5×13.5)	(800)						

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DI MENSIONS&MAXIMUM PERMISSIBLE RIPPLE CURRENT

Cap. (μF)	WV	35		50		63		100	
		1V		1H		1J		2A	
0.1	0R1			4×5.4	1.0				
0.22	R22			4×5.4	2.6				
0.33	R33			4×5.4	3.2				
0.47	R47			4×5.4	5				
1	010			4×5.4	8				
2.2	2R2			4×5.4	12				
3.3	3R3			4×5.4	17			6.3×7.7 (8×6.2)	30 (30)
4.7	4R7	4×5.4	16	5×5.8	22			8×10.5	50
10	100	5×5.8	27	6.3×5.4	32	6.3×7.7 (8×6.2)	45 (45)	8×10.5	55
22	220	6.3×5.4	44	6.3×7.7 (8×6.2)	58 (58)	8×10.5	65	10×10.5	70
33	330	6.3×7.7 (8×6.2)	57 (57)	8×10.5	140	10×10.5	80	10×10.5	80
47	470	8×10.5	92	10×10.5	310	10×10.5	90	12.5×13.5 (10×13.5)	250 (150)
100	101	10×10.5	151	10×10.5	310	10×13.5	150	12.5×13.5	300
150	151	10×10.5	290	10×10.5	310			16×16.5	600
220	221	10×10.5	375	12.5×13.5 (10×13.5)	340 (320)	12.5×13.5	470		
330	331	12.5×13.5 (10×13.5)	380 (375)	12.5×16 (12.5×13.5)	600 (500)	16×16.5 (12.5×16)	650 (550)		
470	471	12.5×13.5	520	16×16.5	700				
680	681	12.5×13.5	550						
1000	102	16×16.5 (12.5×16)	750 (600)						
								Case Size	Ripple Current

Case Size ØD×L(mm),ripple current(mA rms) at 105°C 120Hz

FREQUENCY COEFFICIENT OF ALLOWABLE RIPPLE CURRENT

Frequency		50Hz	120Hz	300Hz	1KHz	10KHz~	
Coefficient	Ø 4~ Ø 10	0.70	1.00	1.17	1.36	1.50	
	Ø 12.5~ Ø 16	~68μF	0.75	1.00	1.35	1.57	2.00
		100~470μF	0.80	1.00	1.23	1.34	1.50
		680~3300μF	0.85	1.00	1.10	1.13	1.15

Please visit our website to get more update data, those data & specification are subject to change without notice.