Aluminum Electrolytic Capacitors

RJA

Features

- 105℃, wide temperature range
- Suitable for high reliability products
- RoHS Compliance

Sleeve & Marking Color: Deep Purple & White

SPECIFICATIONS

Items	Performance
Category 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 120 Hz, 20℃)	Rated Voltage: 6.3 / 10 / 16 / 25 / 35 / 50 / 63 / 100 Tan δ (max): 0.23 / 0.20 / 0.16 / 0.14 / 0.12 / 0.10 / 0.09 / 0.08 When the capacitance exceeds 1,000 μF, 0.02 shall be added every 1,000 μF increase.
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	63	100
Impedance Ratio	Z(-25℃)	φD＜16	4	3	3	2	2	2	2	2
	/Z(+20℃)	φD≧16	5	4	3	2	2	2	2	3
	Z(-40℃)	φD＜16	8	6	4	4	4	3	3	3
	/Z(+20℃)	φD≧16	12	8	6	4	3	3	3	6

Endurance

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 with rated ripple current for 2,000 hours at 105℃.

Shelf Life Test

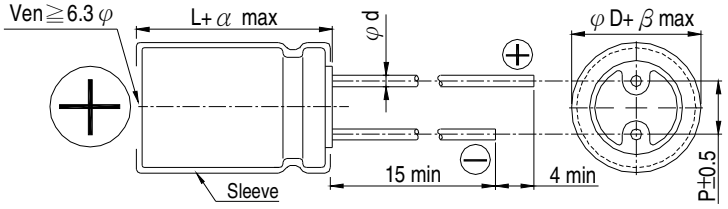
Test Time	1,000 Hrs
Capacitance Change	Within ±20%of initial value
Dissipation Factor	Less than 200% of specified value
Leakage Current	Within specified value

* The above specifications shall be satisfied when the capacitors are restored to 20℃ after exposing them for 1,000 hours at 105℃ without voltage applied.

Ripple Current & Frequency Multipliers

Cap.(μF) \ Freq.(Hz)	60 (50)	120	500	1k	10k up
Under 100	0.70	1.00	1.30	1.40	1.50
100 ＜ C ≦ 1,000	0.75	1.00	1.20	1.30	1.35
1,000 up above	0.80	1.00	1.10	1.12	1.15

DIAGRAM OF DIMENSIONS



LEAD SPACING AND DIAMETER Unit: mm

φD	5	6.3	8	10	12.5	16	18	22
P	2.0	2.5	3.5	5.0	5.0	7.5	7.5	10
φd	0.5		0.6			0.8		1.0
α	1.0			1.5				2.0
β	0.5							

DIMENSION & PERMISSIBLE RIPPLE CURRENT

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

V. DC / μF	Contents	6.3V (0J)				10V (1A)				16V (1C)				25V (1E)			
		ϕD×L	mA	*ϕD×L	mA	ϕD×L	mA	*ϕD×L	mA	ϕD×L	mA	*ϕD×L	mA	ϕD×L	mA	*ϕD×L	mA
10	100									5×11	36			5×11	40		
22	220									5×11	58			5×11	68		
33	330									5×11	71			5×11	78		
47	470					5×11	76			5×11	90			5×11	97		
100	101	5×11	103			5×11	105			6.3×11	133	5×11	110	6.3×11	142		
220	221	6.3×11	160	5×11	140	6.3×11	175	5×11	150	8×11.5	215	6.3×11	180	8×11.5	236		
330	331	8×11.5	219	6.3×11	190	8×11.5	245	6.3×11	200	8×11.5	260			10×12.5	335	8×11.5	330
470	471	8×11.5	261	6.3×11	230	8×11.5	290	6.3×11	250	10×12.5	370	8×11.5	310	10×16	440	10×12.5	380
1,000	102	10×12.5	455	8×11.5	380	10×16	550	10×12.5	460	10×20	640	10×16	560	12.5×20	770	10×20	680
2,200	222	10×20	750			12.5×20	860	10×20	760	12.5×25	1,000	12.5×20	920	16×25	1,170	12.5×25	1,090
3,300	332	12.5×20	920	10×20	840	12.5×20	1,100			16×25	1,300	12.5×25	1,170	16×31.5	1,460	16×25	1,400
4,700	472	16×25	1,330	12.5×20	1,090	16×25	1,400	12.5×25	1,260	16×31.5	1,600	16×25	1,480	18×35.5	1,780	16×31.5	1,710

V. DC / μF	Contents	35V (1V)				50V (1H)				63V (1J)				100V (2A)			
		ϕD×L	mA	*ϕD×L	mA	ϕD×L	mA	*ϕD×L	mA	ϕD×L	mA	*ϕD×L	mA	ϕD×L	mA	*ϕD×L	mA
0.1	0R1					5×11	1.3			5×11	2.1			5×11	2.4		
0.22	R22					5×11	2.9			5×11	3.2			5×11	3.8		
0.33	R33					5×11	4.3			5×11	5.4			5×11	5.8		
0.47	R47					5×11	7.1			5×11	7.1			5×11	7.1		
1	010					5×11	13			5×11	15			5×11	15		
2.2	2R2					5×11	20			5×11	30			5×11	26		
3.3	3R3					5×11	30			5×11	31			5×11	31		
4.7	4R7					5×11	33			5×11	36			6.3×11	40		
10	100	5×11	45			5×11	50			5×11	54			8×11.5	66	6.3×11	54
22	220	5×11	71			5×11	78			6.3×11	86			8×11.5	111	6.3×11	93
33	330	6.3×11	90	5×11	85	6.3×11	96	5×11	90	8×11.5	141	6.3×11	100	10×12.5	183	8×11.5	144
47	470	6.3×11	105	5×11	90	8×11.5	130	6.3×11	117	8×11.5	151	6.3×11	129	10×16	193	10×12.5	204
100	101	8×11.5	170	6.3×11	150	8×11.5	188			10×12.5	235			12.5×20	320	10×20	285
220	221	10×12.5	300	8×11.5	270	10×20	355	10×16	335	10×20	400	10×16	360	16×25	507	13×25	440
330	331	10×16	400	10×12.5	350	10×20	460	10×16	410	12.5×20	520	10×20	490	16×31.5	674	16×25	478
470	471	10×20	520	10×16	460	12.5×25	610	10×20	530	12.5×25	720	12.5×20	665	18×35.5	880	16×31.5	688
1,000	102	12.5×25	920	12.5×20	830	16×25	1,080	12.5×25	980	16×31.5	1,260	16×25	1,190				
2,200	222	16×31.5	1,340	16×25	1,260	18×35.5	1,530	16×35.5	1,470								
3,300	332	18×35.5	1,650	16×35.5	1,610	22×40	1,707	18×35.5	1,650								
4,700	472	18×40	1,900	18×35.5	1,900												