CHANGYU

Miniature Aluminum Electrolytic Capacitors

Series

CNH

FEATURESS

1、Nonpolar ,high temperature

2、Suit for use in polarity and change circuits

SPECIFICATIONS

Item	Performance Characteristics
Operating Temperature Range	-40 to +105℃
Rated Working voltage Range	6.3 to 100V
Nominal Capacitance Range	0.47to 1000(uF)
Capacitance Tolerance	±20%（120Hz，+20℃）
Leakage Current	I≤0.03CV or 3(uA) After 5 minutes application of rated working voltage at +20℃

Dissipation Factor tan δ (120Hz+20℃)

Working voltage(V)	6.3	10	16	25	35	50	63	100
tan δ (max.)	0.26	0.24	0.22	0.20	0.16	0.14	0.12	0.10

Low Temperature Characteristics

Impedance ratio max. at 120Hz

Working voltage(V)	6.3	10	16	25	35	50	63	100
Z-25℃/Z+20℃	4	3	2	2	2	2	2	2
Z-40℃/Z+20℃	8	6	4	4	3	3	3	3

Multiplier for Ripple Current vs. Frequency

CAP(uF)\Hz		60(50)	120	400	1K	10K	50K-100K
Multiplier	CAP≤10	0.8	1	1.30	1.45	1.65	1.70
	10＜CAP≤100	0.8	1	1.23	1.36	1.48	1.53
	100＜CAP≤1000	0.8	1	1.16	1.25	1.35	1.38

Multiplier for Ripple Current vs. Temperature

Temperature℃	45	60	70	85	95	105
Multiplier	2.1	1.9	1.65	1.4	1.25	1.00

High Temperature Loading

Test conditions
- Duration : 2000 hours
- Ambient temperature : +105℃
- Applied voltage : Rated DC working voltage to each polarity every 250 hours

Post test requirements at +20℃
- Leakage current : ≤ Initial specified value
- Capacitance change : ≤±20% of initial measured value
- tan δ : ≤200% of initial specified value

Shelf Life

Test conditions
- Duration : 1000 hours
- Ambient temperature : +105℃
- Applied voltage : (None)

Post test requirements at +20℃

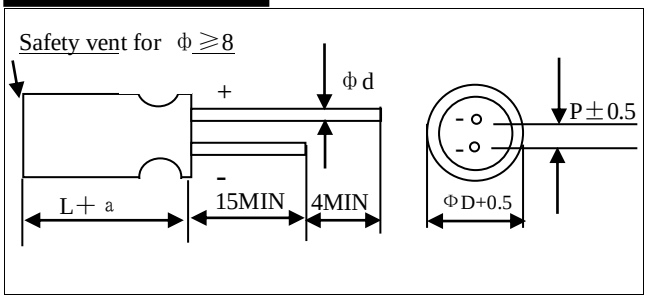
Same limits for high temperature loading
- Leakage current : ≤ Initial specified value
- Capacitance change : ≤±20% of initial measured value
- tan δ : ≤200% of initial specified value

Miniature Aluminum Electrolytic Capacitors

Others	JIS C-5141 JIS C-5102

CASE SIZE TABLE

Unit:mm



DΦ	5	6.3	8	10	13	16
P	2.0	2.5	3.5	5.0	5.0	7.5
dΦ（±0.05）	0.5			0.6		0.8

aMAX	(L<20)1.5
	(L≥20)2.0

DIMENSIONS

ΦD×L(mm)

WV(SV) / Cap.(uF)	Code	6.3V(8) 0J		10V(13) 1A		16V(20) 1C		25V(32) 1E	
4.7	475							5×11	23
10	106					5×11	30	5×11	34
22	226			5×11	42	6.3×11	51	6.3×11	55
33	336	5×11	46	6.3×11	57	6.3×11	63	8×12	79
47	476	6.3×11	61	6.3×11	67	8×12	89	10×12.5	100
100	107	8×12	104	10×12.5	125	10×12.5	139	10×15	164
220	227	10×12.5	168	10×15	204	10×20	279	13×25	336
330	337	10×15	229	10×20	275	13×21	346	13×25	414
470	477	10×20	300	13×21	371	13×25	460	16×26	543
1000	108	13×25	550	16×26	668	16×26	746	16×30	871
								Case Size	Allowable ripple

Allowable Ripple (mA rms)at 105℃120Hz

ΦD×L(mm)

WV(SV) / Cap.(uF)	Code	35V(44) 1V		50V(63) 1H		63V(79) 1J		100V(125) 2A	
0.47	474			5×11	8			5×11	10
1	105			5×11	12			5×11	15
2.2	225			5×11	18			6.3×11	22
3.3	335			5×11	22	6.3×11	26	8×12	32
4.7	475	5×11	25	6.3×11	29	6.3×11	31	8×12	39
10	106	6.3×11	40	8×12	51	8×12	53	10×12.5	64
22	226	8×12	68	10×12.5	82	10×17	96	10×20	114
33	336	10×12.5	89	10×17	107	10×20	129	13×21	164
47	476	10×12.5	111	10×20	146	10×20	157	13×25	200
100	107	10×20	196	13×25	264	13×25	275	16×26	304
220	227	13×25	364	16×26	443	16×30	486		
330	337	16×26	493	16×30	593				
470	477	16×26	586					Case Size	Allowable ripple

Allowable Ripple (mA rms)at 105℃120Hz