

Aluminum Electrolytic Capacitor

HF series

- Ultra Low impedance at High frequency range.
- High ripple current, 105°C 4000~8000hours long life.
- RoHS Compliance
- 高頻低阻抗。
- 高紋波電流、105°C 4000~8000小時長壽命產品。

SPECIFICATIONS

Items 項 目	Characteristics 特 性								
Capacitance Tolerance 靜電容量誤差	± 20%(120Hz,20℃)								
Operating Temperature Range 適用溫度範圍	-40 ~ +105℃								
Rated Voltage Range 額定電壓範圍	6.3 ~ 100VDC								
Leakage Current 洩漏電流	I ≤ 0.01CV or 3 (μA) which is greater.(After 2 minutes application of DC rated voltage, at 20 ℃)								
Dissipation Factor 散逸因素(tan δ)	Measurement Frequency:120Hz. Temperature: 20℃								
	Rated Voltage(V)	6.3	10	16	25	35	50	63	100
	tan δ(Max)	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.08
	When nominal capacitance over 1000μF, tanδ shall be added 0.02 to the listed value with increase of every 1000μF.								
Low Temperature Stability 低溫特性 Impedance Ratio(Max) 阻抗比率(最大值)	Measurement Frequency: 120Hz.								
	Rated 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	3	3	3	3	3
Load Life 負荷壽命	Time	φ	5	6.3	8	10	13	16	18
		hours	4000	4000	5000	6000	7000	8000	8000
	Capacitance Change		within ±20% of Initial Value						
	tan δ		200% or less of Initial Specified Value						
	Leakage Current		Initial Specified Value or less						
Shelf Life 放置壽命	The following specifications shall be satisfied when the capacitors are restored to 20℃ after exposing them for 1,000 hours 105℃ without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to them 4.1 of JIS C5101-4.								
	Capacitance Change		within ±20% of Initial Value						
	tan δ		200% or less of Initial Specified Value						
	Leakage Current		Initial Specified Value or less						
Standards 參照標準	JIS C 5101-4 (IEC 60384)								

Frequency Coefficient of Permissible Ripple Current

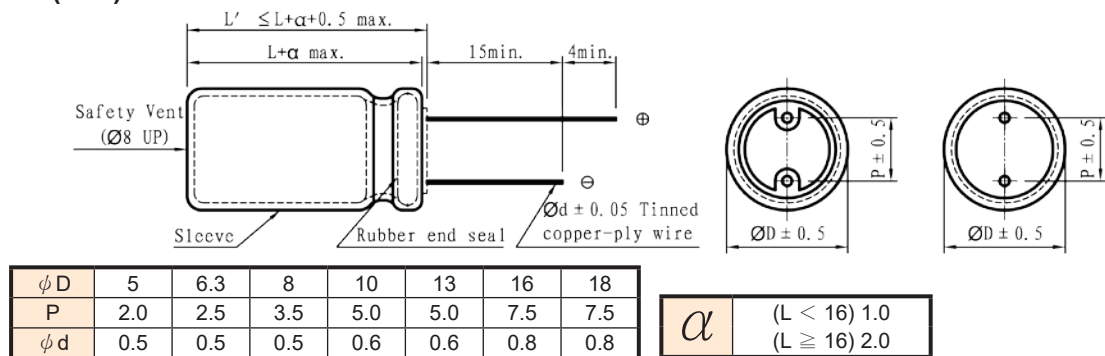
Capacitance (μF)	Frequency (Hz)			
	120	1K	10K	100K
5.6 ~ 180	0.40	0.75	0.90	1.00
220 ~ 560	0.50	0.85	0.94	1.00
680 ~ 1800	0.60	0.87	0.95	1.00
2200 ~ 3900	0.75	0.90	0.95	1.00
4700 ~ 18000	0.85	0.95	0.98	1.00

The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise. When long life performance is required in actual use, the rms ripple current has to be reduced.

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DIMENSIONS(mm)



STANDARD RATINGS

D×L(mm) ; R.C.(mA rms) at 105°C 100KHz ; IMP (Ω max) at 20°C, -10°C 100KHz.

Cap (μF)	V (Code)	6.3(0J)				10(1A)				16(1C)				25(1E)			
		D x L	IMP		R.C.	D x L	IMP		R.C.	D x L	IMP		R.C.	D x L	IMP		R.C.
			20°C	-10°C			20°C	-10°C			20°C	-10°C			20°C	-10°C	
47										5x11	0.500	1.000	170	5x11	0.490	1.000	175
100						5x11	0.500	1.000	170	6.3x11	0.250	0.500	295	6.3x11	0.250	0.500	295
150		5x11	0.500	1.000	170									6.3x15	0.180	0.350	420
220						6.3x11	0.240	0.500	295	6.3x15	0.170	0.360	410	8x12	0.120	0.240	650
330		6.3x11	0.240	0.500	295	6.3x15	0.180	0.350	400	8x12	0.120	0.230	660	8x16	0.090	0.180	750
390														10x13	0.090	0.180	770
470		6.3x15	0.180	0.360	400	8x12	0.120	0.230	650	8x16	0.089	0.180	740	8x20	0.079	0.150	820
560										10x13	0.090	0.180	770	10x16	0.067	0.136	1060
680		8x12	0.120	0.240	655	8x16	0.090	0.180	830	8x20	0.080	0.160	830				
820		10x13	0.091	0.180	860	10x13	0.090	0.180	860	10x16	0.067	0.136	1070	10x20	0.052	0.104	1230
1000		8x16	0.091	0.190	830	8x20	0.080	0.150	1010					10x25	0.044	0.090	1450
1200		10x16	0.067	0.136	1250	10x16	0.067	0.136	1250	10x20	0.052	0.103	1270	10x30	0.037	0.073	1720
1500		8x20	0.082	0.170	1060	10x20	0.052	0.103	1420	10x25	0.045	0.090	1450	13x21	0.037	0.076	1670
1800		10x20	0.051	0.103	1420	10x25	0.044	0.090	1640	10x30	0.036	0.074	1700				
2200						10x30	0.036	0.074	1930	13x21	0.038	0.076	1670	13x25	0.030	0.060	1960
2700		10x25	0.044	0.090	1640	13x21	0.038	0.077	1650					13x30	0.024	0.050	2320
3300		13x21	0.037	0.075	1650	13x25	0.030	0.060	1960	13x30	0.024	0.050	2330	16x22	0.029	0.068	2220
3900		13x25	0.030	0.060	1960	16x22	0.028	0.058	2230	16x22	0.028	0.058	2220	16x26	0.027	0.056	2500
4700		13x30	0.024	0.050	2320	16x26	0.022	0.044	2570	16x32	0.018	0.038	3020	18x20	0.027	0.056	2500
5600		16x22	0.028	0.057	2230	18x20	0.027	0.056	2490	18x25	0.020	0.040	2750	18x32	0.018	0.035	3340
6300										18x32	0.017	0.035	3350	18x35	0.016	0.031	3690
6800		13x40	0.017	0.034	2880	16x32	0.017	0.034	3160	18x35	0.016	0.032	3670				
8200		16x26	0.022	0.043	2570	18x25	0.020	0.040	2750								
10000		18x20	0.027	0.055	2490	16x36	0.017	0.034	3150								
12000						18x32	0.017	0.036	3340								
15000		16x40	0.015	0.030	3720	18x35	0.016	0.031	3670								
18000		18x32	0.017	0.035	3340	18x40	0.015	0.030	3810								
		18x35	0.016	0.031	3670												
		18x40	0.015	0.030	3810												

※ 13mm may be replaced by 12.5mm upon customer's request.

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