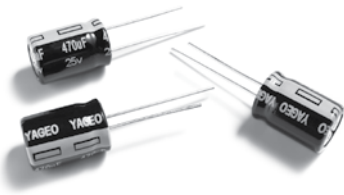


Miniature Aluminum Electrolytic Capacitors

SW [Higher Temperature Range and Long Life]

125°C 2000 ~ 5000 Hours, High Temperature Long Life



DESCRIPTION

Applicable for Electronic Ballast, Lighting Ballast

MULTIPLIER FOR RIPPLE CURRENT

FREQUENCY (Hz)	120	1K	10K	100K
Cap ≤ 10µF	0.40	0.75	0.90	1.00
10µF < Cap ≤ 100µF	0.50	0.85	0.95	1.00
100µF < Cap ≤ 1,000µF	0.60	0.88	0.96	1.00
1,000µF < Cap	0.75	0.90	0.98	1.00

ELECTRICAL CHARACTERISTICS

Operating Temperature Range : -40 ~ +125°C

Rated Voltage Range : 10 ~ 63VDC

Rated Capacitance Range : 47 ~ 4700µF

Capacitance Tolerance : ±20% at 120Hz, 20°C

Leakage Current (Max.) (20°C): I = 0.01CV or 3µA whichever is greater.

(After Rated Voltage Applied for 2 Minutes)

I = Leakage Current (µA), C = Nominal Capacitance (µF), V = Rated Voltage (V)

Dissipation Factor (Max.) (tanδ) (120Hz, 20°C)

WV (V) :	10	16	25	35	50	63
D.F. (%) :	20	16	14	12	10	9

When nominal capacitance is over 1000µF, the value of tanδ shall be increased by 0.02 for every addition of 1000µF.

Low Temperature Stability Impedance Ratio (Max.)

WV (V) :	10	16	25	35	50	63
Z-25°C/Z+20°C :	3	2	2	2	2	2
Z-40°C/Z+20°C :	6	4	4	4	4	3

Endurance: After the rated voltage and rated ripple current have been applied at 125°C for 2000~5000 hours, the capacitors shall meet the following requirements.

Dø :	8ø	10ø	≥13ø
Load Life :	2000hrs	3000hrs	5000hrs

(a) Capacitance Change: Within ±30% of Initial Value

(b) Dissipation Factor: 300% or Less of Initial Specified Value

(c) Leakage Current: Initial Specified Value or Less

Shelf Life: After leaving capacitors under no load at 125°C for 1000 hours.

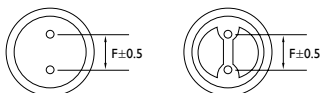
(a) Capacitance Change: Within ±30% of Initial Value

(b) Dissipation Factor: 300% or Less of Initial Specified Value

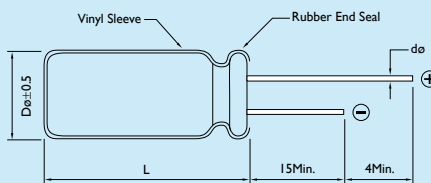
(c) Leakage Current: 500% or Less of Initial Specified Value

DIAGRAM OF DIMENSIONS

Dimensions: mm



Dø < 20 Dø + 0.5
Dø ≥ 20 Dø + 1



Dø	F	dø
8.0	1.5	0.6
10.0		
13.0	2.0	
16.0		0.8
18.0		

CASE SIZE & PERMISSIBLE RIPPLE CURRENT OF STANDARD PRODUCTS

D x L: mm

CAP. (μF)	RATED VOLTAGE WV (SURGE VOLTAGE WV)											
	10 (13)			16 (20)			25 (32)			35 (44)		
	SIZE	RIPPLE	ESR	SIZE	RIPPLE	ESR	SIZE	RIPPLE	ESR	SIZE	RIPPLE	ESR
100							8 x 11	340	0.200	10 x 12	340	0.140
220	8 x 11	340	0.200	8 x 11	340	0.200	10 x 12	500	0.140	10 x 15	500	0.090
330	10 x 12	500	0.140	10 x 12	500	0.140	10 x 15	630	0.090	10 x 19	770	0.070
470	10 x 15	630	0.090	10 x 19	770	0.070	10 x 19	770	0.070	13 x 20	920	0.042
1000	10 x 19	770	0.070	13 x 20	920	0.042	13 x 25	1250	0.038	16 x 25	1380	0.028
2200	13 x 25	1250	0.038	16 x 25	1380	0.028	16 x 32	1450	0.025			
3300	16 x 25	1380	0.028	16 x 32	1450	0.025						
4700	16 x 32	1450	0.025	18 x 32	1720	0.018						

Note: 1. Ripple Current: (mA/rms) 125°C, 100kHz

2. ESR: 100kHz / 20°C (Ω)



CASE SIZE & PERMISSIBLE RIPPLE CURRENT OF STANDARD PRODUCTS

D x L: mm

CAP. (μF)	RATED VOLTAGE WV (SURGE VOLTAGE WV)					
	50 (63) SIZE			63(79) SIZE		
	SIZE	RIPPLE	ESR	SIZE	RIPPLE	ESR
47	8 x 11	245	0.680	8 x 11	245	0.068
100	10 x 12	415	0.360	10 x 15	455	0.300
220	10 x 19	491	0.180	13 x 20	665	0.120
330	13 x 20	665	0.120	13 x 25	995	0.100
470	13 x 25	995	0.100	16 x 25	1000	0.084
1000	16 x 32	1280	0.078			

Note: 1. Ripple Current: (mA/rms) 125°C, 100KHz

2. ESR: 100KHz / 20°C (Ω)