

SG [Electronic Ballast]

105°C Single-Ended Lead Aluminum Electrolytic Capacitors

Miniature Aluminum Electrolytic Capacitors

ELECTRICAL CHARACTERISTICS

Operating Temperature Range : -40 ~ +105°C / -25 ~ +105°C

Rated Voltage Range : 160 ~ 400V / 450V

Rated Capacitance Range : 4.7 ~ 330μF / 3.3~100μF

Capacitance Tolerance : -20 ~ +20% at 120Hz, 20°C

DC Leakage Current (μA): $I = 0.06CV (\mu A) + 10\mu A$ whichever is greater.
(After Rated Voltage Applied for 2 Minutes)

Dissipation Factor

WV (V) :	160	200	250	350	400	450
D.F. (%) :	15	15	15	20	24	24

Low Temperature Stability Impedance Ratio (Max.)

WV (V) :	160	200	250	350	400	450
Z - 25°C / Z + 20°C	3	3	3	5	5	6
Z - 40°C / Z + 20°C	6	6	6	6	6	-

Endurance : After the rated voltage and rated ripple current have been applied at 105°C for 5000 hours, the capacitors shall meet the following requirements.

- (a) Capacitance Change : Within 20% of Initial Value
- (b) Dissipation Factor : 200% or Less of Initial Specified Value
- (c) Leakage Current : Initial Specified Value or Less

Shelf Life : After having been placed at 105°C without voltage applied for 1000 hours, the capacitors shall meet the same requirements as Endurance.



MULTIPLIER FOR RIPPLE CURRENT

Frequency Coefficient

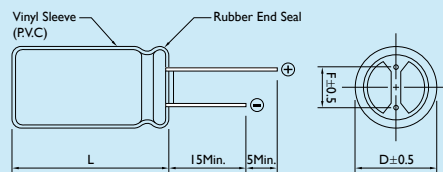
FREQUENCY (Hz)	50	60	120	300
6.3~100V Below~68μF	0.8	0.8	1.0	1.2
FREQUENCY (Hz)	1K	10K~100K		
6.3~100V Below~68μF	1.4	1.6		

DIAGRAM OF DIMENSIONS

Dimensions: mm

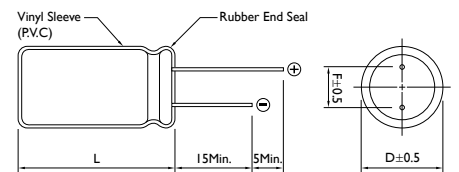
Dø	F	dø
5.0	2.0	0.5
6.3	2.5	
8.0	3.5	0.6
10.0	5.0	
12.0		
13.0		
16.0	7.5	0.8
18.0		
22.0	10.0	0.8 (1.0)

Rubber Stand-off



$L \leq 16 : L + 1.5\text{Max.}$
 $L > 16 : L + 2\text{Max.}$
 $D\phi = 8 \ \& \ 10 : L + 2.5\text{Max.}$

$D\phi < 20 : D\phi + 0.5$
 $D\phi \geq 20 : D\phi + 1$





CASE SIZE & PERMISSIBLE RIPPLE CURRENT OF STANDARD PRODUCTS

D x L: mm

CAP. (μF)	RATED VOLTAGE WV (SURGE VOLTAGE WV)					
	160 (200) SIZE		200 (250) SIZE		250 (300) SIZE	
		RIPPLE		RIPPLE		RIPPLE
10			*10 x 15	80	*10 x 15	85
					*10 x 19,5	100
15			*10 x 15	100		
22	10 x 19,5	160	10 x 19,5	160	*10 x 25	145
					13 x 20	160
33	10 x 19,5	210	*10 x 19,5	160	13 x 20	210
			13 x 20	210		
47	13 x 20	260	13 x 20	260	13 x 25	270
					16 x 20	275
68	13 x 25	360	13 x 25	360	16 x 25	380
	16 x 20	430	16 x 20	430	18 x 20	375
100	16 x 25	475	16 x 25	475	16 x 32	520
	18 x 20	465	18 x 20	465	18 x 25	500
150	16 x 32	650	18 x 25	650	18 x 32	650
	18 x 25	625				
220	16 x 32	750	18 x 32	780	18 x 40	820
	18 x 25	725				
330	18 x 32	960				

Note: 1. Ripple Current: (mA/rms) 105°C, 120Hz

2. *Down size: 3000 Hours

CASE SIZE & PERMISSIBLE RIPPLE CURRENT OF STANDARD PRODUCTS

D x L: mm

CAP. (μF)	RATED VOLTAGE WV (SURGE VOLTAGE WV)					
	350 (400) SIZE		400 (450) SIZE		450 (500) SIZE	
		RIPPLE		RIPPLE		RIPPLE
3.3					10 x 19.5	60
4.7			*10 x 15	60	13 x 20	80
6.8			*10 x 15	72	*10 x 19.5	90
10	10 x 19.5	100	10 x 19.5	100	13 x 20	110
					13 x 25	110
22	13 x 20	160	13 x 25	170	16 x 25	190
			16 x 20	200	18 x 20	200
33	13 x 25	230	16 x 25	230	16 x 32	275
	16 x 20	250	18 x 20	250	18 x 25	280
47	16 x 25	300	16 x 32	300	18 x 32	340
	18 x 20	315	18 x 25	325		
68	16 x 32	400	18 x 36	420	18 x 32	395
	18 x 25	380			18 x 40	460
100	18 x 32	530	18 x 40	545	22 x 40	580
150			22 x 40	650		

Note: 1. Ripple Current: (mA/rms) 105°C, 120Hz

2. *Down size: 3000 Hours