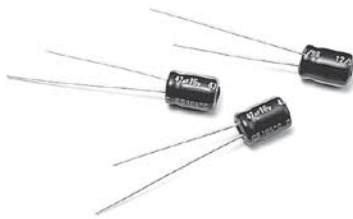


# Miniature Aluminum Electrolytic Capacitors

# SS [ For Super Miniature ]

105°C Single-Ended Lead Aluminum Electrolytic Capacitors



## DESCRIPTION

This type is designed to meet the demand or equipments for greatly reduced size and thickness, such as: portable micro computer; disk driver; small calculator and audio equipment.

Application : Portable Micro Computer; Disk Driver; Small Calculator and Audio

### MULTIPLIER FOR RIPPLE CURRENT

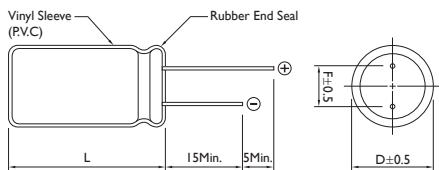
Frequency Coefficient

FREQUENCY (Hz)	50	120	300	1K	10K
0.1~47 $\mu$ F	0.75	1.00	1.20	1.30	1.50
100~330 $\mu$ F	0.75	1.00	1.10	1.15	1.20

Temperature Coefficient

TEMPERATURE (°C)	65	85	105
FACTOR	1.70	1.30	1.00

## DIAGRAM OF DIMENSIONS



## ELECTRICAL CHARACTERISTICS

Operating Temperature Range : -40 ~ +105°C

Rated Voltage Range : 4 ~ 63V

Rated Capacitance Range : 0.1 ~ 470 $\mu$ F

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

DC Leakage Current ( $\mu$ A) :  $I = 0.01CV$  ( $\mu$ A) or  $3\mu$ A Whichever is greater.  
( After Rated Voltage Applied for 2 Minutes )

Dissipation Factor

WV (V) :	4	6.3	10	16	25	35	50	63
D.F. (%) :	35	24	20	17	15	12	10	8

Endurance : After Applying Rated Voltage for 1000 Hours at 105°C

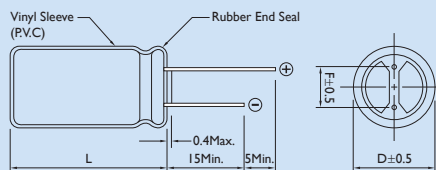
- (a) Capacitance Change : Within 20% of Initial Value
- (b) Dissipation Factor : 200% or Less of Initial Specified Value
- (c) Leakage Current : Initial Specified Value or Less

Shelf Life : After leaving capacitors under load at 105°C for 500 hours.

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

Dimensions: mm

### Rubber Stand-off



$L \leq 16$   $L + 1.5\text{Max.}$        $D\phi < 20$   $D\phi + 0.5$   
 $L > 16$   $L + 2\text{Max.}$        $D\phi \geq 20$   $D\phi + 1$   
 $D\phi = 8 \ \& \ 10$   $L + 2.5\text{Max.}$

D $\phi$	F	d $\phi$
4.0	1.5	0.45
5.0	2.0	
6.3	2.5	
8.0	3.5	0.5

## CASE SIZE & PERMISSIBLE RIPPLE CURRENT OF STANDARD PRODUCTS

D x L: mm

CAP. (μF)	RATED VOLTAGE WV (SURGE VOLTAGE WV)															
	4 (5) SIZE RIPPLE		6.3 (8) SIZE RIPPLE		10 (13) SIZE RIPPLE		16 (20) SIZE RIPPLE		25 (32) SIZE RIPPLE		35 (44) SIZE RIPPLE		50 (63) SIZE RIPPLE		63 (79) SIZE RIPPLE	
0.1													4 x 7	1	4 x 7	1
0.22													4 x 7	2	4 x 7	2
0.33													4 x 7	3	4 x 7	4
0.47													4 x 7	5	4 x 7	6
0.68													4 x 7	6		
1.0									4 x 7	10			4 x 7	10	4 x 7	13
2.2							4 x 7	7					4 x 7	19	4 x 7	21
3.3							4 x 7	13					4 x 7	24	4 x 7	26
4.7							4 x 7	19	4 x 7	24	4 x 7	24	4 x 7	29	4 x 7	26
											5 x 7	24	5 x 7	31	6.3 x 7	33
10				4 x 7	22	4 x 7	29	4 x 7	33	4 x 7	34	4 x 7	37	5 x 7	42	
									5 x 7	35	5 x 7	36	5 x 7	45	6.3 x 7	50
									6.3 x 7	35			6.3 x 7	45		
22			4 x 7	37	4 x 7	31	4 x 7	36	4 x 7	43	5 x 7	48	6.3 x 7	65		
				5 x 7	38	5 x 7	44	5 x 7	51	6.3 x 7	57					
									6.3 x 7	53						
33	4 x 7	30	5 x 7	42	4 x 7	39	4 x 7	50	5 x 7	55	6.3 x 7	70	6.3 x 7	80		
					5 x 7	47	5 x 7	57	6.3 x 7	65						
47	4 x 7	35	4 x 7	46	4 x 7	50	5 x 7	75	5 x 7	67	6.3 x 7	81				
			5 x 7	55	5 x 7	60	6.3 x 7	77	6.3 x 7	79						
					6.3 x 7	60										
68							5 x 7	84								
100	5 x 7	55	5 x 7	75	5 x 7	85	5 x 7	94	6.3 x 7	120						
			6.3 x 7	90	6.3 x 7	100	6.3 x 7	110	8 x 7	120						
150							6.3 x 7	120								
220	6.3 x 7	95	6.3 x 7	130	6.3 x 7	135	6.3 x 7	110								
							8 x 7	140								
							8 x 9	140								
330			8 x 7	140			8 x 9	155								
470			8 x 7	130												
			8 x 9	150	8 x 9	165	8 x 9	170								

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