

7

- V
- o) #
- k =0#

Specifications

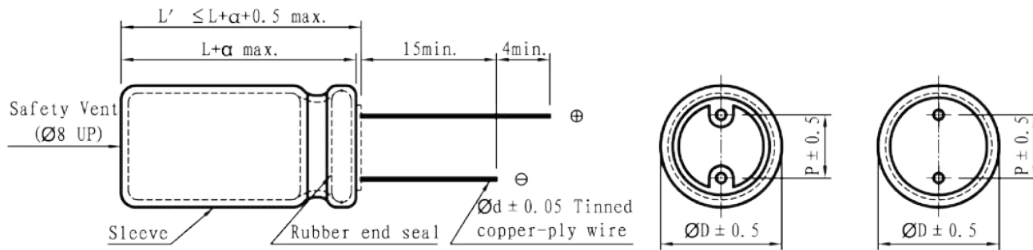
Items	Characteristics									
Capacitance Tolerance	± 20%(120Hz,20°C)									
Operating Temperature Range	-40 ~ +105°C									
Rated Voltage Range	6.3 ~ 160VDC									
Leakage Current	I ≤ 0.03CV or 3 (μA) which is greater. (After 5 minutes application of DC rated voltage, at 20 °C)									
Dissipation Factor	Measurement Frequency: 120Hz. Temperature: 20°C									
	Rated Voltage(V)	6.3	10	16	25	35	50	63	100	160
	tan δ(Max)	0.26	0.24	0.22	0.20	0.16	0.14	0.12	0.10	0.15
	When nominal capacitance over 1000μF, tanδ shall be added 0.02 to the listed value with increase of every 1000μF .									
Low Temperature Stability Impedance Ratio(Max)	Measurement Frequency: 120Hz.									
	Rated Voltage(V)	6.3	10	16	25	35	50	63	100	160
	Z(-25°C) / Z(20°C)	4	3	2	2	2	2	2	2	3
	Z(-40°C) / Z(20°C)	10	8	6	5	4	4	3	3	4
Load Life	2000hours with the polarity inverted every 250 hours at 105°C									
	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	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours 105°C 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	JIS C 5101-4 (IEC 60384)									

Frequency Coefficient of Permissible Ripple Current

Capacitance (μF)	Frequency (Hz)			
	50	120	1K	≥ 10K
< 100	0.80	1.00	1.30	1.50
≥ 100	0.80	1.00	1.15	1.20

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.

DIMENSIONS(mm)



ϕD	4	5	6.3	8	10	13	16
P	1.5	2.0	2.5	3.5	5.0	5.0	7.5
ϕd	0.45	0.5	0.5	0.5	0.6	0.6	0.8

α	(L < 16) 1.0
	(L ≥ 16) 2.0

Standard Ratings

DxL (mm) ; R.C.(mA rms) at 105°C 120Hz

Cap (µF)	V (Code)	6.3 (0J)		10 (1A)		16 (1C)		25 (1E)	
		D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L	R.C.
3.3								4x7	15
4.7						4x7	18	5x7	18
10				4x7	23	5x7	27	5x11	36
						5x11	30	6.3x7	28
22	5x7	33	5x7	36	6.3x7	41	6.3x11	55	
			5x11	42	5x11	43	8x7	42	
33	5x7	40	6.3x7	45	6.3x11	66	8x12	75	
	5x11	48	6.3x11	58	8x7	52			
47	6.3x7	49	6.3x11	70	6.3x11	80	10x13	96	
	6.3x11	65	8x7	55					
100	8x12	105	10x13	125	6.3x11	66	10x16	158	
220	10x13	168	10x16	205	10x13	240	13x21	306	
330	10x16	230	10x20	278	13x21	346	13x25	415	
470	10x20	330	13x21	370	13x25	460	16x26	545	
1000	13x25	550	16x26	665	16x26	750	16x32	870	

Cap (µF)	V (Code)	35 (1V)		50 (1H)		63 (1J)		100 (2A)		160 (2C)	
		D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L	R.C.
0.1				4x7	2.1	4x7	2.6				
0.22				4x7	4.5	4x7	5.0				
0.33				4x7	5.6	4x7	6.1				
0.47				4x7	6.6	4x7	7.3				
0.1~0.47				5x11	8	5x11	5	5x11	10	5x11	4
				4x7	9.7	4x7	10	5x11	15	6.3x11	12
1				5x11	12	5x11	15				
	2.2	4x7	13	5x7	14	5x7	16	6.3x11	24	6.3x11	17
			5x11	18	5x11	22					
3.3	5x7	16	5x7	18	6.3x7	20	6.3x11	30	8x12	25	
			5x11	22	5x11	23					
4.7	5x7	20	6.3x7	22	5x11	30	8x12	40	8x12	30	
	5x11	25	6.3x11	30	8x7	24					
5.6	5x11	28	6.3x11	35	6.3x11	40	8x12	48	8x14	35	
6.8	5x11	33	6.3x11	40	8x12	45	8x14	52	8x16	41	
10	5x11	35	8x12	50	6.3x11	55	8x12	55	10x16	55	
	8x7	30									
22	6.3x11	63	10x13	82	10x16	90	10x20	120	13x21	106	
33	8x12	80	10x16	100	10x20	128	13x21	168	13x21	130	
47	8x12	90	10x20	146	10x16	150	13x21	200	13x25	167	
56	10x16	140	13x21	195	13x21	218	13x21	250	16x26	206	
100	10x20	196	13x25	260	13x25	275	13x25	295	16x32	300	
220	13x25	365	16x26	445	16x32	486					
330	16x26	492	16x32	595							
470	16x32	595									

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