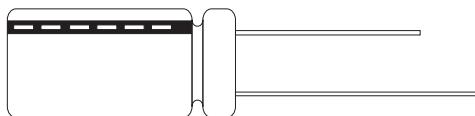


■ FEATURES

- Long life, 105°C, 3000 ~ 10000 hours assured
- Low impedance at 100KHz with selected materials



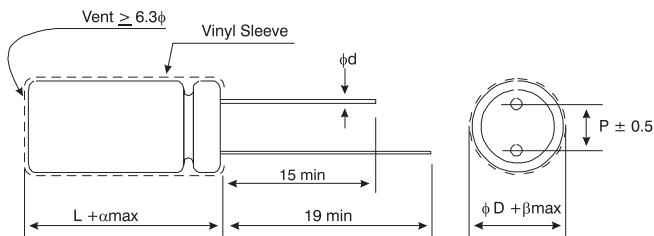
■ SPECIFICATIONS

Item	Performance								
Operating Temp.	-40°C ~ +105°C								
Capacitance Tolerance	$\pm 20\%$ (120Hz, 20°C)								
Leakage Current (at 20°C)	$I = 0.01CV$ or 3 mA whichever is greater (after 2 minutes) Where, C= rated capacitance in F. V= rated DC working voltage in V.								
Dissipation Factor Tan at 120Hz, 20°C	Rated Voltage	6.3	10	16	25	35	When the capacitance exceeds 1000 F, 0.02 shall be added every 1000 F increase.		
	Tan (max)	0.22	0.19	0.16	0.14	0.12			
Low Temperature Characteristics (at 120Hz)	Rated Voltage	6.3	10	16	25	35	Impedance ratio shall not exceed the values given in the table.		
	Impedance Ratio	$Z(-25^\circ\text{C})/Z(+20^\circ\text{C})$	4	3	2	2			
		$Z(-40^\circ\text{C})/Z(+20^\circ\text{C})$	8	6	4	3			
Load Life Test	Rated Voltage	6.3 ~ 10				16 ~ 35			
	Test Time	3000 hours for D 6.3mm 6000 hours for D =8~10mm 8000 hours for D 12.5mm				4000 hours for D 6.3mm 6000 hours for D =8mm 8000 hours for D =10mm 10000 hours for D 12.5mm			
	Capacitance Change	Within $\pm 25\%$ of initial value							
	Dissipation Factor	Less than 200% of specified value							
	Leakage Current	Within specified value							
The above specifications shall be satisfied when capacitors are restored to 20°C after the rated voltage applied with rated ripple current for test time at 105°C.									
Shelf Life Test	Test Time	1000 hours							
	Capacitance Change	Within $\pm 25\%$ of initial value							
	Dissipation Factor	Less than 200% of specified value							
	Leakage Current	Within specified value							
The above specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1000 hours at 105°C without voltage applied.									
Ripple Current & Frequency Multipliers	Freq. (Hz) Cap. (F)	120	1K	10K	100K				
	Under 270	0.50	0.73	0.92	1.0				
	330 to 680	0.55	0.77	0.94	1.0				
Ripple Current & Frequency Multipliers	820 to 1800	0.60	0.80	0.96	1.0				
	2200 up above	0.70	0.85	0.98	1.0				
	Temperature (°C)	Under 65	85	105					
Multiplier		2.1	1.7	1.0					
Standards	Satisfies Characteristic JIS C 5101-4								

■ DIMENSIONS

Unit: mm

D	5	6.3	8	10	12.5	16	18
P	2.0	2.5	3.5	5.0	5.0	7.5	7.5
d	0.5		0.6		0.8		
	1.0		1.5		0.5		



DIMENSIONS & PERMISSIBLE RIPPLE CURRENT

Impedance: at 100KHz, 20°C
 Ripple Current: mA/rms at 100Hz, 105°C

V.DC Item D x L	F	6.3V (0J)				10V (1A)				16V (1C)					
		Impedance (, Max/100K Hz)		Ripple Current (mA/rms, 105°C)		Impedance (, Max/100K Hz)		Ripple Current (mA/rms, 105°C)		Impedance (, Max/100K Hz)		Ripple Current (mA/rms, 105°C)			
		20°C	-10°C	120Hz	100KHz	20°C	-10°C	120Hz	100KHz	20°C	-10°C	120Hz	100KHz		
5 x 11	120	0.72	1.8	116	165	82	0.72	1.8	116	165	56	0.72	1.8	116	165
6.3 x 11	220	0.38	0.95	179	255	180	0.38	0.95	179	255	120	0.38	0.95	179	255
6.3 x 15	330	0.27	0.68	231	330	270	0.27	0.68	231	330	180	0.27	0.68	231	330
8 x 11.5	390	0.20	0.50	332	415	330	0.20	0.50	291	415	270	0.20	0.50	332	415
8 x 15	560	0.16	0.40	396	495	470	0.16	0.40	396	495	330	0.16	0.40	396	495
8 x 20	820	0.11	0.28	512	640	680	0.11	0.28	512	640	470	0.11	0.28	512	640
10 x 12.5	470	0.12	0.30	500	625	390	0.12	0.30	500	625	270	0.12	0.30	500	625
10 x 16	680	0.084	0.21	660	825	680	0.084	0.21	660	825	470	0.084	0.21	660	825
10 x 20	1200	0.062	0.16	936	1040	1000	0.062	0.16	832	1040	680	0.062	0.16	936	1040
10 x 25	1500	0.052	0.13	1134	1260	1200	0.052	0.13	1134	1260	820	0.052	0.13	1134	1260
10 x 30	2200	0.044	0.11	1296	1440	1500	0.044	0.11	1296	1440	1200	0.044	0.11	1296	1440
12.5 x 20	2200	0.046	0.12	1206	1340	1800	0.046	0.12	1206	1340	1200	0.046	0.12	1206	1340
12.5 x 25	2700	0.034	0.085	1521	1690	2200	0.034	0.085	1521	1690	1500	0.034	0.085	1521	1690
12.5 x 30	3900	0.030	0.075	1755	1950	2700	0.030	0.075	1755	1950	2200	0.030	0.075	1755	1950
12.5 x 35	4700	0.027	0.068	1980	2200	3300	0.027	0.068	1980	2200	2700	0.027	0.068	1980	2250
12.5 x 40	5600	0.024	0.060	2151	2390	3900	0.024	0.060	2151	2390	3300	0.024	0.060	2151	2390
16 x 25	5600	0.028	0.070	1863	2070	3900	0.028	0.070	1863	2070	2700	0.028	0.070	1863	2070
16 x 31.5	6800	0.025	0.063	2115	2350	5600	0.025	0.063	2115	2350	3900	0.025	0.063	2115	2350
16 x 35.5						6800	0.022	0.055	2295	2550	4700	0.022	0.055	2295	2550
16 x 40											5600	0.018	0.045	2610	2900
18 x 35.5											6800	0.021	0.053	2394	2660

V.DC Item D x L	F	25V (1E)				35V (1V)				
		Impedance (, Max/100K Hz)		Ripple Current (mA/rms, 105°C)		Impedance (, Max/100K Hz)		Ripple Current (mA/rms, 105°C)		
		20°C	-10°C	120Hz	100KHz	20°C	-10°C	120Hz	100KHz	
5 x 11	39	0.72	1.8	116	165	27	0.72	1.8	91	165
6.3 x 11	82	0.38	0.95	179	255	56	0.38	0.95	179	255
6.3 x 15	120	0.27	0.68	231	330	82	0.27	0.68	231	330
8 x 11.5	150	0.20	0.50	291	415	120	0.20	0.50	291	415
8 x 15	220	0.16	0.40	347	495	180	0.16	0.40	347	495
8 x 20	330	0.11	0.28	448	640	220	0.11	0.28	448	640
10 x 12.5	180	0.12	0.30	438	625	120	0.12	0.30	438	625
10 x 16	330	0.084	0.21	578	825	220	0.084	0.21	578	825
10 x 20	470	0.062	0.16	832	1040	330	0.062	0.16	728	1040
10 x 25	560	0.052	0.13	1008	1260	390	0.052	0.13	1008	1260
10 x 30	820	0.044	0.11	1152	1440	560	0.040	0.11	1152	1440
12.5 x 20	820	0.046	0.12	1072	1340	560	0.046	0.12	1072	1340
12.5 x 25	1000	0.034	0.085	1352	1690	680	0.034	0.085	1352	1690
12.5 x 30	1500	0.030	0.075	1755	1950	1000	0.030	0.075	1560	1950
12.5 x 35	1800	0.027	0.068	1980	2200	1200	0.027	0.068	1980	2200
12.5 x 40	2200	0.024	0.060	2151	2390	1500	0.024	0.060	2151	2390
16 x 25	1800	0.028	0.070	1863	2070	1200	0.028	0.070	1863	2070
16 x 31.5	2700	0.025	0.063	2115	2350	1800	0.025	0.063	2115	2350
16 x 35.5	3300	0.022	0.055	2295	2550	2200	0.022	0.055	2295	2550
16 x 40	3900	0.018	0.045	2610	2900	2700	0.018	0.045	2610	2900
18 x 35.5	3900	0.021	0.053	2394	2660	2700	0.021	0.053	2394	2660
18 x 35.5	4700	0.017	0.043	2709	3010	3300	0.010	0.043	2709	3010