

- Life 2000 hours at 85°C
- Small size allows wider choice of capacitance and voltage for automatic insertion.

## Characteristics

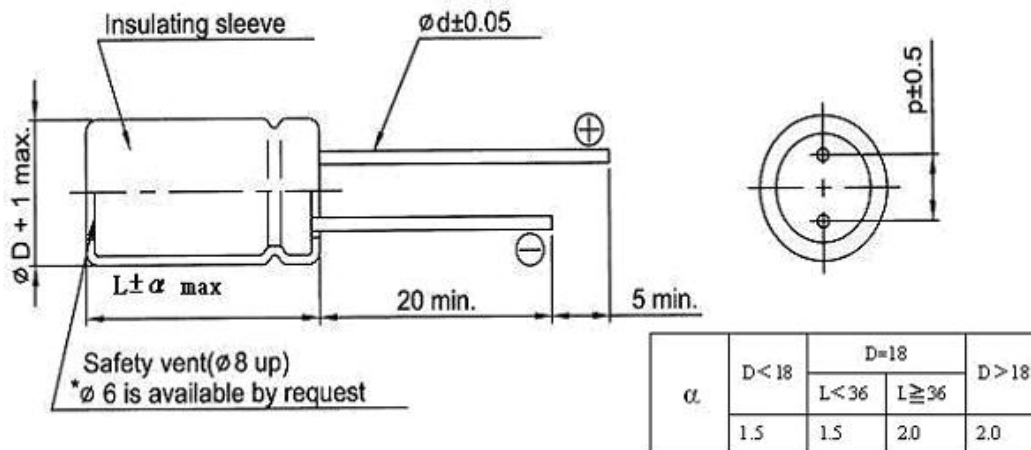
<b>Voltage Range</b>	6.3 to 100 VDC				160 to 450 VDC				
<b>Capacitance Range</b>	0.47 to 10000uF				0.47 to 470uF				
<b>Temperature Range</b>	-40 to +85°C				-25 to +85°C				
<b>Capacitance Tolerance</b>	±20% at 120Hz, 20°C (10% Tol. is available upon request)								
<b>Leakage Current</b>	I≤0.01CV or 3uA, whichever is greater 3 minutes after Rated Voltage applied				I≤0.03CV or 3uA, whichever is greater 3 minutes after Rated Voltage applied				
<b>Dissipation Factor (tanδ)</b>	Rated Voltage (V)	6.3	10	16	25	35	50	63	
	Dissipation Factor(tanδ)max	0.22	0.19	0.16	0.14	0.12	0.10	0.10	
	Rated Voltage (V)	100	160	200	250	350	400	450	
	Dissipation Factor(tanδ)max	0.08	0.16	0.18	0.18	0.20	0.20	0.20	
For capacitance > 1000uF, add 0.02 for every 1000uF, (at 20°C, 120Hz)									
<b>Stability at Low Temperature</b>	Impedance ration at 120Hz								
	Rated Voltage (V)	6.3	10	16	25	35	50	63	100
	Z-25°C/Z 20°C	4	3	2	2	2	2	2	2
	Z-40°C/Z 20°C	8	6	4	4	3	3	3	3
	Rated Voltage (V)	160	200	250	350	400	450		
	Z-25°C/Z 20°C	2	2	3	5	15	15		
<b>Load Life</b>	After the rated voltage has been applied for 2000 hours at 85°C	Capacitance change			Within ±20% of initial value				
		D.F. tanδ			150% or less of initial specified value				
		Leakage current			Less than Initial specified value				
<b>Shelf Life</b>	After storage for 1000 hours at 105°C with no voltage applied, the capacitor shall meet the specified limit in load life. Pre-treatment for measurement shall be conducted after application of DC working voltage for 30 minutes.								

## Case Size of Standard Products & Maximum Ripple Current mA rms 85°C 120Hz

Cap. <sup>WV</sup> uF	6.3V		10V		16V		25V		35V		50V		63V	
	Size	R.C.	Size	R.C.	Size	R.C.	Size	R.C.	Size	R.C.	Size	R.C.	Size	R.C.
0.47										→	5x11	11	5x11	11
1										→	5x11	17	5x11	17
2.2										→	5x11	25	5x11	28
3.3										→	5x11	35	5x11	35
4.7										→	5x11	42	5x11	45
10				→	5x11	60	5x11	60	5x11	60	5x11	65	5x11	70
22				→	5x11	75	5x11	90	5x11	95	5x11	100	6.3x11	115
33				→	5x11	85	5x11	95	5x11	105	5x11 6.3X11	120 125	6.3x11	140
47				→	5x11	130	5x11	130	5x11 6.3x11	130 149	6.3x11	150	6.3x11 8x12	180 190
100	5x11	130	5x11	145	5x11	160	6.3x11	190	6.3x11 8x12	198 210	8x12	250	10x13	300
220	5x11	220	6.3x11	267	6.3x11	280	8x12	330	8x14 10x13	350 370	10x13 10x16	425 440	10x16 10x21	490 500
330	6.3x11	280	6.3x11	310	8x12	370	8x12	410	10x13	480	10x16	520	10x21	690
470	6.3x11	350	8x12	380	8x12	470	8x14 10x13	510 540	10x16	580	10x21 13x21	750 780	13x26	930
1000	8x12	590	8x14	730	10x16	790	10x21	950	13x21	1150	13x26 16x26	1350 1400	16x26	1550
2200	10x16	1050	10x16	1100	13x21	1350	13x21 13x26	1300 1550	16x26	1700	16x36	2100	18x36	2200
3300	10x21	1150	13x21	1400	13x26	1700	16x26	1700	16x32	2250	18x36	2400	22x41	2550
4700	13x21	1420	13x26	1800	16x26	2100	16x32	2400	18x36	2400	22x41	2850	25x41	2950
6800	13x26	1950	16x26	2250	16x32	2550	18x36	2700	18x41	2600	25x41	3250		
10000	16x26	2300	16x36	2400	18x36	2700	18x41 22x36	2800	22x41	2800	25x50	3600		

Cap. uF	100V		160V		200V		250V		350V		400V		450V	
	Size	R.C.	Size	R.C.	Size	R.C.	Size	R.C.	Size	R.C.	Size	R.C.	Size	R.C.
0.47	5x11	12	5x11	12	5x11	12	5x11	12	6.3x11	15	6.3x11	12	6.3x11	12
1	5x11	22	5x11	17	6.3x11	17	6.3x11	17	6.3x11	22	8x12	20	8x12	22
2.2	5x11	33	6.3x11	30	6.3x11	30	6.3x11	20	8x12	30	8x12 10x13	32	10x13	35
3.3	5x11	40	6.3x11	36	6.3x11	36	8x12	43	10x13	46	10x13	45	10x16	40
4.7	5x11	48	8x12	40	8x12	51	10x13	51	10x13	63	10x16	66	10x21	50
10	6.3x11	70	8x12 10x13	80 83	10x13 10x16	83 88	10x16	90	10x21	115	10x21 13x21	115 120	13x26	105
22	6.3x11 8x12	130 135	10x16	135	10x21	135	10x21 13x21	135 142	13x21	180	13x26	190	16x26	150
33	8x12	170	10x21	180	13x21	205	13x21	210	16x26	250	16x26	250	16x32	210
47	10x13	230	13x21	230	13x21	200	13x26	240	16x32	290	16x32	290	16x36	280
100	10x21	390	13x26 16x26	430 450	16x26	460	16x32	450	18x41	430	18x41	430		
220	13x26	630	16x36	850	16x36	750	18x41 22x30	800 870						
330	16x26	760	18x41	890										
470	16x26	1000	18x41	1180										
1000	18x41	1600												

**Diagram of dimensions (mm)**



D $\phi$	5	6.3	8	10	13	16	18	22	25
F	2.0	2.5	3.5	5.0	5.0	7.5	7.5	10	12.5
d $\psi$	0.5			0.6		0.8		1.0	1.0