



# Features

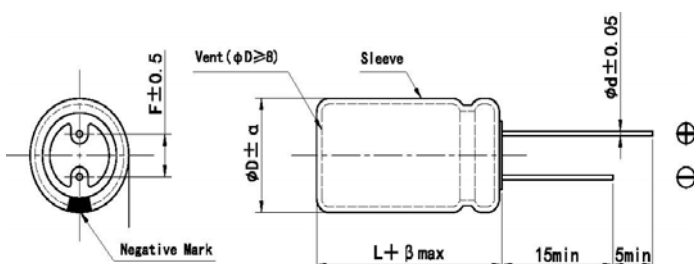
- 105°C, 5000 hours, ultra low impedance, high ripple current.
- Suit for use in switching power,LCD TV,LED and special Control power supply.



## ◆ Specifications

Items	Characteristics																
Rated Voltage Range	6.3~63V.DC																
Operating Temperature Range	-55°C~+105°C																
Capacitance Tolerance	±20%(M) (25°C,100 or 120Hz)																
Leakage Current	$I \leq 0.01 CV$ or $3(\mu A)$ Whichever is greater Where, I: max.leakage current( $\mu A$ ), C: Nominal capacitance( $\mu F$ ), V:Rated voltage(V)(At 25°C after 2 minutes)																
Dissipation Factor $\tan\delta$	(25°C,100 or 120Hz) <table border="1"> <tr> <td>Rated voltage(<math>V_{dc}</math>)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> </tr> <tr> <td><math>\tan\delta</math>(Max.)</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> <td>0.10</td> <td>0.08</td> <td>0.08</td> </tr> </table> When nominal capacitance exceeds 1000 $\mu F$ ,add 0.02 to the value above for each 1000 $\mu F$ increase.	Rated voltage( $V_{dc}$ )	6.3	10	16	25	35	50	63	$\tan\delta$ (Max.)	0.16	0.14	0.12	0.10	0.10	0.08	0.08
Rated voltage( $V_{dc}$ )	6.3	10	16	25	35	50	63										
$\tan\delta$ (Max.)	0.16	0.14	0.12	0.10	0.10	0.08	0.08										
Low Temperature Characteristics (Max.Impedance Ratio)	Impedance ratio at 100Hz or 120Hz shall not exceed the values given in the below table. <table border="1"> <tr> <td>Rated voltage(<math>V_{dc}</math>)</td> <td>6.3~10</td> <td>16~25</td> <td>35~63</td> </tr> <tr> <td><math>Z_{-55^\circ C}/Z_{+20^\circ C}</math></td> <td>10</td> <td>8</td> <td>5</td> </tr> </table> When nominal capacitance exceeds 1000 $\mu F$ ,add 1 to the value above for each 1000 $\mu F$ increase.	Rated voltage( $V_{dc}$ )	6.3~10	16~25	35~63	$Z_{-55^\circ C}/Z_{+20^\circ C}$	10	8	5								
Rated voltage( $V_{dc}$ )	6.3~10	16~25	35~63														
$Z_{-55^\circ C}/Z_{+20^\circ C}$	10	8	5														
Shelf Life	After storage at 105°C for 1000 hours, the capacitors shall meet the following requirements. <table border="1"> <tr> <td>Capacitance Change</td> <td><math>\leq \pm 20\%</math> of the initial value</td> </tr> <tr> <td>D.F.( <math>\tan\delta</math>)</td> <td><math>\leq 200\%</math> of the initial specified value</td> </tr> <tr> <td>Leakage Current</td> <td><math>\leq 200\%</math> of the initial specified value</td> </tr> </table>	Capacitance Change	$\leq \pm 20\%$ of the initial value	D.F.( $\tan\delta$ )	$\leq 200\%$ of the initial specified value	Leakage Current	$\leq 200\%$ of the initial specified value										
Capacitance Change	$\leq \pm 20\%$ of the initial value																
D.F.( $\tan\delta$ )	$\leq 200\%$ of the initial specified value																
Leakage Current	$\leq 200\%$ of the initial specified value																
Load Life	After application of rated voltage with rated ripple current for the specified period of time at +105°C,the following specification shall be satisfied. <table border="1"> <tr> <td>Capacitance Change</td> <td><math>\leq \pm 20\%</math> of the initial value</td> <td>Dia.(mm)</td> <td>Life Time</td> </tr> <tr> <td>D.F.( <math>\tan\delta</math>)</td> <td><math>\leq 250\%</math> of the initial specified value</td> <td>5~6.3</td> <td>3000 hours</td> </tr> <tr> <td>Leakage Current</td> <td><math>\leq</math> the initial specified value</td> <td>8~10</td> <td>4000 hours</td> </tr> <tr> <td></td> <td></td> <td>Over 13</td> <td>5000 hours</td> </tr> </table>	Capacitance Change	$\leq \pm 20\%$ of the initial value	Dia.(mm)	Life Time	D.F.( $\tan\delta$ )	$\leq 250\%$ of the initial specified value	5~6.3	3000 hours	Leakage Current	$\leq$ the initial specified value	8~10	4000 hours			Over 13	5000 hours
Capacitance Change	$\leq \pm 20\%$ of the initial value	Dia.(mm)	Life Time														
D.F.( $\tan\delta$ )	$\leq 250\%$ of the initial specified value	5~6.3	3000 hours														
Leakage Current	$\leq$ the initial specified value	8~10	4000 hours														
		Over 13	5000 hours														
Others	Meet Q/RME 10—2003, GB/T 5993-2003																

## ◆ Dimensions



mm

φ	250	35	385	50	50	75
α			0.5	0.6		
d	0.5 (0.6)			0.6		0.8
β	1.0			2	(0.8)	



◆  
◆ **Size, Max Ripple Current And Impedance**

Voltage (V)	Cap. (μF)	Size ΦD×L (mm)	tanδ	Z (Ω, 25°C, 100KHz)	IR (mArms, 105°C, 100KHz)
6.3	100	5×11	0.16	0.72	241
	220	6.3×11	0.16	0.32	406
	330	6.3×11	0.16	0.24	498
	470	8×12	0.16	0.17	543
	680	8×12	0.16	0.14	597
	680	10×12	0.16	0.14	743
	1000	8×16	0.16	0.10	820
	1000	10×12	0.16	0.10	950
	1500	10×16	0.16	0.060	1247
	2200	10×20	0.18	0.038	1318
	3300	13×20	0.20	0.032	1871
	4700	13×25	0.22	0.032	2365
	6800	16×25	0.24	0.028	3081
	10	47	5×11	0.14	0.72
100		5×11	0.14	0.72	288
220		6.3×11	0.14	0.32	428
330		8×12	0.14	0.24	624
470		8×12	0.14	0.17	573
680		8×16	0.14	0.13	828
680		10×12	0.14	0.13	831
1000		10×16	0.14	0.10	1139
1500		10×20	0.14	0.060	1450
2200		13×20	0.16	0.038	1673
2200		13×25	0.16	0.038	1845
3300		13×25	0.18	0.032	2062
4700		16×25	0.20	0.032	2658
6800		13×40	0.22	0.028	3519
6800	16×35	0.22	0.028	3707	
16	10	5×11	0.12	1.5	91
	22	5×11	0.12	0.72	135
	47	5×11	0.12	0.72	213
	100	6.3×11	0.12	0.40	354
	220	8×12	0.12	0.25	652
	330	8×12	0.12	0.18	707
	470	10×12	0.12	0.10	739
	680	8×20	0.12	0.08	916
	680	10×16	0.12	0.08	1004
	1000	10×20	0.12	0.06	1342
	1500	13×20	0.12	0.05	1782
	2200	13×25	0.14	0.038	1944
	3300	16×25	0.16	0.032	2539
	4700	16×30	0.18	0.032	3281

Voltage (V)	Cap. (μF)	Size ΦD×L (mm)	tanδ	Z (Ω, 25°C, 100KHz)	IR (mArms, 105°C, 100KHz)
25	10	5×11	0.10	1.5	120
	22	5×11	0.10	0.72	179
	47	5×11	0.10	0.72	213
	100	6.3×11	0.12	0.38	387
	220	8×12	0.12	0.23	624
	330	10×12	0.12	0.12	952
	470	10×16	0.10	0.09	987
	470	10×20	0.10	0.09	994
	680	10×20	0.10	0.07	952
	1000	13×20	0.10	0.05	1681
	1500	13×20	0.10	0.038	1906
	2200	16×25	0.12	0.032	2318
	3300	16×30	0.14	0.032	3074
	35	10	5×11	0.10	1.5
22		5×11	0.10	0.72	146
33		5×11	0.10	0.45	196
47		6.3×11	0.10	0.32	297
100		8×12	0.10	0.25	515
220		10×12	0.10	0.12	869
330		10×16	0.10	0.06	1203
470		10×20	0.10	0.045	1089
680		13×20	0.10	0.040	1518
1000		13×25	0.10	0.032	1852
1500		16×25	0.10	0.032	2550
2200		16×30	0.12	0.032	2898
3300		16×35	0.14	0.030	3292
50		10	5×11	0.08	1.5
	22	5×11	0.08	0.72	179
	33	6.3×11	0.08	0.45	249
	47	8×12	0.08	0.32	353
	100	10×12	0.08	0.25	586
	100	10×16	0.08	0.22	592
	220	10×16	0.08	0.12	982
	330	10×20	0.08	0.060	1326
	470	13×20	0.08	0.040	1834
	680	13×25	0.08	0.040	2432
63	1000	16×25	0.08	0.030	3315
	1200	16×35	0.08	0.030	3767
	10	5×11	0.08	1.5	120
	22	6.3×11	0.08	0.72	203
63	33	6.3×11	0.08	0.40	249
	47	8×12	0.08	0.32	353



### ◆ Ripple Current Multiplier

Frequency Coefficient

Frequency (Hz)	50/60	100/120	1K	10K	100K
10~330 $\mu$ F	0.35	0.50	0.75	0.85	1.0
470~1500 $\mu$ F	0.45	0.65	0.85	0.90	1.0
2200~6800 $\mu$ F	0.53	0.75	0.90	0.95	1.0