



Features

- 105°C, 5000 hours, ultra low impedance, high ripple current.
- Suitable for using in switching power supplies, LCD TV, LED and special control power supply.

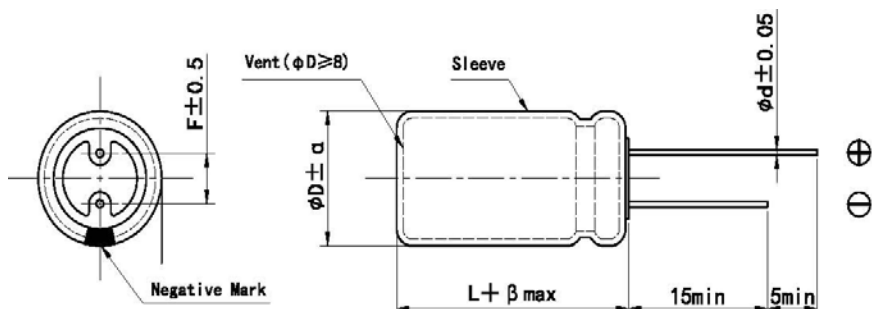


Specifications

Items	Characteristics																
Rated Voltage Range	100~450V.DC																
Operating Temperature Range	-40°C ~ +105°C																
Capacitance Tolerance	±20%(M) (25°C, 100 or 120Hz)																
Leakage Current	$I \leq 0.02 CV + 10(\mu A)$ Where, I: max. leakage current(μA), C: Nominal capacitance(μ F), V: Rated voltage(V)(At 25°C after 2 minutes)																
Dissipation Factor tanδ	(25°C, 100 or 120Hz) <table border="1"> <tr> <td>Rated voltage(V_{dc})</td> <td>100</td> <td>160</td> <td>200</td> <td>250~450</td> </tr> <tr> <td>tanδ(Max.)</td> <td>0.10</td> <td>0.12</td> <td>0.14</td> <td></td> </tr> </table>	Rated voltage(V _{dc})	100	160	200	250~450	tanδ(Max.)	0.10	0.12	0.14							
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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(V_{dc})</td> <td>100~160</td> <td>200~450</td> </tr> <tr> <td>Z_{40°C}/Z_{+20°C}</td> <td>4</td> <td>7</td> </tr> </table>	Rated voltage(V _{dc})	100~160	200~450	Z _{40°C} /Z _{+20°C}	4	7										
Rated voltage(V _{dc})	100~160	200~450															
Z _{40°C} /Z _{+20°C}	4	7															
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>≤±20% of the initial value</td> </tr> <tr> <td>D.F.(tanδ)</td> <td>≤ 200% of the initial specified value</td> </tr> <tr> <td>Leakage Current</td> <td>≤200% of the initial specified value</td> </tr> </table>	Capacitance Change	≤±20% of the initial value	D.F.(tanδ)	≤ 200% of the initial specified value	Leakage Current	≤200% of the initial specified value										
Capacitance Change	≤±20% of the initial value																
D.F.(tanδ)	≤ 200% of the initial specified value																
Leakage Current	≤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>≤±20% of the initial value</td> <td>Dia.(mm)</td> <td>Life Time</td> </tr> <tr> <td>D.F.(tanδ)</td> <td>≤ 200% of the initial specified value</td> <td>5~8</td> <td>3000 hours</td> </tr> <tr> <td>Leakage Current</td> <td>≤ the initial specified value</td> <td>10</td> <td>4000 hours</td> </tr> <tr> <td></td> <td></td> <td>Over 13</td> <td>5000 hours</td> </tr> </table>	Capacitance Change	≤±20% of the initial value	Dia.(mm)	Life Time	D.F.(tanδ)	≤ 200% of the initial specified value	5~8	3000 hours	Leakage Current	≤ the initial specified value	10	4000 hours			Over 13	5000 hours
Capacitance Change	≤±20% of the initial value	Dia.(mm)	Life Time														
D.F.(tanδ)	≤ 200% of the initial specified value	5~8	3000 hours														
Leakage Current	≤ the initial specified value	10	4000 hours														
		Over 13	5000 hours														
Others	Meet Q/RME 14—2003, GB/T 5993-2003																

◆ Dimensions

mm



D	5	6.3	8	10	13	16	18
d	0.5			0.6	0.6	0.8	
F	2.0	2.5	3.5	5.0		7.5	
α	0.5						
β	1.0		2.0				



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)
100	10	6.3×11	0.10	4.5	137
	22	8×12	0.10	3.5	242
	33	10×12	0.10	2.2	337
	47	10×16	0.10	1.9	454
	68	10×20	0.10	1.2	538
	100	10×20	0.10	0.7	653
	150	13×20	0.10	0.45	927
	220	13×25	0.10	0.22	1237
	330	16×25	0.10	0.12	1703
	470	16×30	0.10	0.10	2201
160	4.7	6.3×11	0.12	7.5	71
	6.8	6.3×11	0.12	5.0	85
	10	8×12	0.12	4.0	115
	22	10×12	0.12	2.5	194
	22	10×16	0.12	2.5	220
	33	10×20	0.12	2.0	342
	47	13×20	0.12	1.4	474
	68	13×25	0.12	1.0	581
	100	16×25	0.12	0.62	792
	150	16×25	0.12	0.40	971
	150	16×30	0.12	0.40	1051
	220	16×35	0.12	0.30	1472
	220	18×35	0.12	0.20	1572
	330	18×40	0.12	0.12	2043
200	3.3	6.3×11	0.12	11	59
	3.3	8×12	0.12	11	71
	4.7	6.3×11	0.12	6.2	77
	4.7	8×12	0.12	6.2	84
	6.8	8×12	0.12	4.5	110
	10	10×12	0.12	3.0	166
	22	10×16	0.12	2.2	235
	22	10×20	0.12	2.2	306
	33	13×20	0.12	1.4	435
	47	13×20	0.12	1.1	474
	68	13×25	0.12	0.7	581
	100	16×25	0.12	0.45	856
	100	16×30	0.12	0.45	858
	150	16×35	0.12	0.34	1126
220	18×35	0.12	0.18	1455	

Voltage (V)	Cap. (μF)	Size ΦD×L (mm)	tanδ	Z (Ω, 25°C, 100KHz)	IR (mArms, 105°C, 100KHz)
250	2.2	6.3×11	0.14	14.0	57
	3.3	8×12	0.14	9.0	94
	4.7	8×12	0.14	5.0	100
	6.8	8×16	0.14	3.5	115
	10	10×12	0.14	2.8	166
	10	10×16	0.14	2.8	187
	22	10×20	0.14	1.8	217
	33	13×20	0.14	1.2	397
	47	13×25	0.14	1.0	452
	47	16×25	0.14	1.0	643
	68	16×25	0.14	0.65	773
	100	16×30	0.14	0.40	927
	150	18×35	0.14	0.30	1298
	220	18×40	0.14	0.12	1827
400	1	6.3×11	0.14	25	35
	2.2	8×12	0.14	20	68
	3.3	8×16	0.14	16	80
	4.7	10×12	0.14	12	80
	6.8	10×16	0.14	9.0	109
	10	10×20	0.14	7.0	146
	22	13×20	0.14	3.0	300
	33	13×30	0.14	2.0	475
	33	16×25	0.14	2.0	492
	47	16×30	0.14	1.3	635
	68	16×35	0.14	0.9	758
450	1	6.3×11	0.14	25	35
	2.2	8×16	0.14	24	65
	3.3	8×16	0.14	16	87
	3.3	10×12	0.14	16	87
	4.7	10×16	0.14	10	108
	6.8	10×20	0.14	8.0	155
	10	13×20	0.14	4.0	218
	22	13×25	0.14	2.2	357
	22	16×25	0.14	2.2	440
	33	18×30	0.14	1.5	623
450	47	18×30	0.14	1.3	744
	68	18×40	0.14	0.9	927

◆ Ripple Current Multiplier

Coefficient	0.35	0.50	0.75	0.85	1.0
Frequency (Hz)	50/60	100/120	1K	10K	100K

Frequency Coefficient