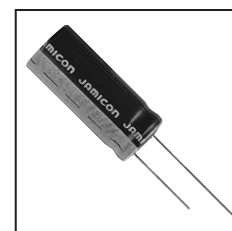


- Endurance: 105°C, 6000~10000hours
- Recommended Applications : Applicable for AV (TV, Viodeo, Audio), OA/HA/Communication, SMPS, Adapter, Monitor/Computer, Converter/Inverter
- Corresponding product to RoHS

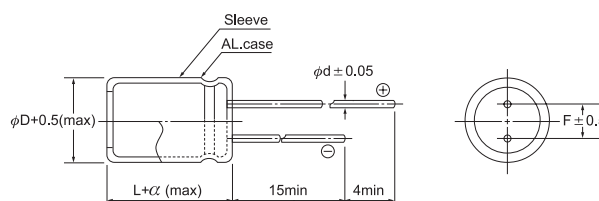


## ● SPECIFICATION

Item	Characteristic											
Operation Temperature Range	-40 ~ +105°C											
Rated Working Voltage	6.3 ~ 100VDC											
Capacitance Tolerance (120Hz 20°C)	±20% (M)											
Leakage Current (20°C)	I ≤ 0.01CV or 3(μA) Whichever is greater after 2 minutes										I : Leakage Current (μA) C : Rated Capacitance (μF) V : Working Voltage (V)	
	Surge Voltage (20°C)	W.V.	6.3	10	16	25	35	50	63	80	100	
	S.V.	8	13	20	32	44	63	79	100	125		
Dissipation Factor (tan δ) (120Hz 20°C)	Add 0.02 per 1000 μF for more than 1000 μF											
	W.V.	6.3	10	16	25	35	50	63	80	100		
	tan δ	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.08	0.08		
Low Temperature Stability	Impedance ratio at 120Hz											
	Rated Voltage (V)	6.3	10	16	25	35	50	63	80	100		
	-25°C / +20°C	4	3	2	2	2	2	2	2	2		
	-40°C / +20°C	8	6	4	3	3	3	3	3	3		
Load Life	After applying rated voltage with rated ripple current for 6000~10000 hours at 105°C, the capacitors shall meet the following requirements.											
	Dφ	5~6.3φ			8φ			10~18φ				
	Life (hours)	6000hrs			8000hrs			10000hrs				
	Capacitance Change	≤ ±30% of initial value for 6.3~10W.V., ≤ ±25% of initial value for 16~100W.V.										
	Dissipation Factor	≤ 200% of initial specified value										
	Leakage current	≤ initial specified value										
Shelf Life	At +105°C no voltage application after 1000 hours, the capacitor shall meet the limits for load life characteristics. (with voltage treatment)											

## ● DIMENSIONS (mm)

φD	5	6.3	8	10	12.5	16	18
F	2.0	2.5	3.5	5.0	5.0	7.5	7.5
d	0.5	0.5	0.6	0.6	0.6	0.8	0.8
α	1.5	1.5	1.5	1.5	2.0	2.0	2.0



## ● RIPPLE CURRENT COEFFICIENTS

Temperature(°C)	≤50	70	85	105
Coefficient	1.90	1.75	1.40	1.00

Frequency(Hz)	120	1k	10k	100k
8.2~33μF	0.42	0.70	0.90	1.00
47~270μF	0.50	0.73	0.92	1.00
330~680μF	0.55	0.77	0.94	1.00
820~1800μF	0.60	0.80	0.96	1.00
2200~8200μF	0.70	0.85	0.98	1.00

● CASE SIZE & MAX RIPPLE CURRENT

Case size : D x L (mm)  
 Max impedance : Ω 20°C 100kHz  
 Max ripple current : mA(rms) 105°C 100kHz

μF	V(DC) Item	6.3			10			16		
		DxL	IMP.	R.C.	DxL	IMP.	R.C.	DxL	IMP.	R.C.
100								5x11	0.242	345
150					5x11	0.242	345			
220		5x11	0.242	345				6.3x11	0.103	540
330					6.3x11	0.103	540			
470		6.3x11	0.103	540				8x12	0.062	945
680					8x12	0.062	945	8x16	0.050	1250
820		8x12	0.062	945				10x12.5	0.043	1330
1000					8x16	0.050	1250	8x20	0.032	1500
					10x12.5	0.043	1330	10x16	0.031	1760
1200		8x16	0.050	1250						
		10x12.5	0.043	1330						
1500		8x20	0.032	1500	8x20	0.032	1500	10x20	0.022	1960
					10x16	0.031	1760			
1800		10x16	0.031	1760	10x20	0.022	1960	10x25	0.020	2250
2200		10x20	0.022	1960	10x25	0.020	2250	12.5x20	0.019	2480
2700		10x25	0.020	2250				12.5x25	0.017	2900
3300					12.5x20	0.019	2480	12.5x30	0.014	3450
								16x20	0.017	3250
3900		12.5x20	0.019	2480	12.5x25	0.017	2900	12.5x35	0.013	3570
4700		12.5x25	0.017	2900	12.5x30	0.014	3450	16x25	0.014	3630
					16x20	0.017	3250			
5600		12.5x30	0.014	3450	12.5x35	0.013	3570			
6800		16x20	0.017	3250	16x25	0.014	3630			
		12.5x35	0.013	3570						
8200		16x25	0.014	3630						

μF	V(DC) Item	25			35			50		
		DxL	IMP.	R.C.	DxL	IMP.	R.C.	DxL	IMP.	R.C.
27								5x11	0.340	238
47					5x11	0.220	345			
56								6.3x11	0.140	385
68		5x11	0.242	345						
100					6.3x11	0.094	540	8x12	0.074	724
120								8x16	0.061	950
150		6.3x11	0.103	540				10x12.5	0.061	979
180								8x20	0.046	1190
220					8x12	0.056	945	10x16	0.042	1370
270					8x16	0.050	1250	10x20	0.030	1580
330		8x12	0.062	945	10x12.5	0.041	1330	10x25	0.028	1870
390		8x16	0.050	1250	8x20	0.032	1500			
470		10x12.5	0.043	1330	10x16	0.030	1760	12.5x20	0.027	2050
560		8x20	0.032	1500	10x20	0.025	1960	12.5x25	0.023	2410
680		10x16	0.031	1760	10x25	0.023	2250	12.5x30	0.021	2860
820		10x20	0.022	1960				12.5x35	0.019	2960
								16x20	0.023	2730
1000		10x25	0.020	2250	12.5x20	0.025	2480	16x25	0.021	3010
1200					12.5x25	0.022	2900			
1500		12.5x20	0.019	2480	12.5x30	0.018	3450			
					16x20	0.020	3250			
1800		12.5x25	0.017	2900	12.5x35	0.018	3570			
2200		12.5x30	0.014	3450	16x25	0.015	3630			
		16x20	0.017	3250						
2700		12.5x35	0.013	3570						
3300		16x25	0.014	3630						

RADIAL TYPE

● CASE SIZE & MAX RIPPLE CURRENT

Case size : D x L (mm)  
 Max impedance : Ω 20°C 100kHz  
 Max ripple current : mA(rms) 105°C 100kHz

μF	V(DC) Item	63			80			100		
		DxL	IMP.	R.C.	DxL	IMP.	R.C.	DxL	IMP.	R.C.
8.2								5x11	1.400	163
12					5x11	1.400	163			
18		5x11	1.000	173				6.3x11	0.570	267
33					6.3x11	0.570	267	8x12	0.360	462
47		6.3x11	0.560	278				8x16	0.250	585
56					8x12	0.360	462	10x12.5	0.230	624
68					8x16	0.250	585	8x20	0.190	735
82		8x12	0.264	525	10x12.5	0.230	624	10x16	0.170	780
100		8x16	0.192	688	8x20	0.190	735	10x20	0.120	1040
								12.5x16	0.130	975
120		10x12.5	0.180	725	10x16	0.170	780	10x25	0.110	1170
150		8x20	0.144	861				12.5x20	0.085	1430
180		10x16	0.132	998	10x20	0.120	1040			
					12.5x16	0.130	975			
220					10x25	0.110	1170	12.5x25	0.060	1620
270		10x20	0.094	1200	12.5x20	0.085	1430	12.5x30	0.051	1950
		12.5x16	0.098	1200				16x20	0.058	1750
330		10x25	0.083	1410	12.5x25	0.060	1620	12.5x35	0.043	2140
390		12.5x20	0.072	1570	12.5x30	0.051	1950	12.5x40	0.036	2340
					16x20	0.058	1750	16x25	0.044	2210
470								18x20	0.054	1950
		12.5x25	0.052	1990	12.5x35	0.043	2140	16x32	0.033	2400
560								18x25	0.038	2270
		12.5x30	0.042	2410	12.5x40	0.036	2340	16x36	0.029	2600
		16x20	0.052	2100	16x25	0.044	2210	18x32	0.031	2470
680					18x20	0.054	1950			
		12.5x35	0.040	2620	16x32	0.033	2400	16x40	0.027	2860
820								18x36	0.027	2860
		12.5x40	0.032	2940	16x36	0.029	2600	18x40	0.026	3510
		16x25	0.038	2730	18x25	0.038	2270			
1000		18x20	0.046	2500						
					16x40	0.027	2860			
1200					18x32	0.031	2470			
		16x32	0.029	2990	18x36	0.027	2860			
1500		18x25	0.037	2800						
		16x36	0.025	3040	18x40	0.026	3510			
1800		18x32	0.030	3300						
		16x40	0.023	3570						
2200		18x36	0.024	3570						
		18x40	0.022	3670						

RADIAL TYPE