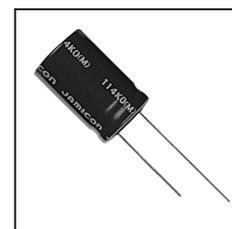


- High ripple current, low E.S.R. and long life
- Suitable for electronic ballast, adaptor and switching power
- Corresponding product to RoHS

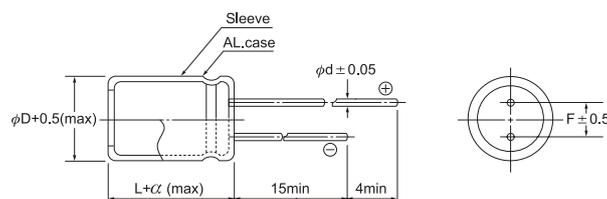


### ● SPECIFICATION

Item	Characteristic					
Operation Temperature Range	-40 ~ +105°C			-25 ~ +105°C		
Rated Working Voltage	160 ~ 400VDC			450VDC		
Capacitance Tolerance (120Hz 20°C)	±20%(M)					
Leakage Current (20°C)	$I \leq 0.06CV + 10 (\mu A)$ Whichever is greater after 2 minutes			I : Leakage Current ( $\mu A$ ) C : Rated Capacitance ( $\mu F$ ) V : Working Voltage (V)		
Surge Voltage (20°C)	W.V.	160	200	250	400	450
	S.V.	200	250	300	450	500
Dissipation Factor (tan $\delta$ ) (120Hz 20°C)	W.V.	160	200	250	400	450
	tan $\delta$	0.15	0.15	0.15	0.24	0.24
Low Temperature Stability	Impedance ratio at 120Hz					
	Rated Voltage (V)	160 ~ 250			400	450
	-25°C / +20°C	3			6	6
	-40°C / +20°C	4			6	—
Load Life	After hours ( $\phi D \leq 8mm$ 2000 hours, $\phi D \geq 10mm$ 3000 hours) application of W.V. and +105°C ripple current value, the capacitor shall meet the following limits. (DC + ripple peak voltage $\leq$ rate working voltage)					
	Capacitance Change	$\leq \pm 20\%$ of initial value				
	Dissipation Factor	$\leq 200\%$ of initial specified value				
	Leakage current	$\leq$ 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)

$\phi D$	10	12.5	16	18
F	5.0	5.0	7.5	7.5
d	0.6	0.6	0.8	0.8
$\alpha$	1.5	2.0	2.0	2.0



### ● RIPPLE CURRENT COEFFICIENTS

Temperature(°C)	65	75	85	95	105
Multiplier	1.80	1.65	1.50	1.25	1.00

Frequency (Hz)	120	1k	10k	100k
W.V.	Multiplier			
160~450	0.50	0.80	0.90	1.00

● CASE SIZE & MAX RIPPLE CURRENT

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

$\mu F$	V(DC) Item	160			200			250		
		DxL	IMP.	R.C.	DxL	IMP.	R.C.	DxL	IMP.	R.C.
4.7								10x16	3.45	150
10		10x16	1.47	220	10x16	1.47	220	10x20	2.70	240
22		10x20	0.80	350	10x20	0.80	350	12.5x20	1.47	380
33		10x20	0.62	430	12.5x20	0.62	460	12.5x25	1.15	510
47		12.5x20	0.50	550	12.5x25	0.50	610	16x25	0.92	610
68		12.5x20	0.39	660	12.5x25	0.39	730	16x32	0.71	810
100		16x25	0.32	890	16x32	0.32	980	18x36	0.59	1110
220		16x36	0.17	1540	18x36	0.17	1640	18x40	0.31	1730

$\mu F$	V(DC) Item	400			450		
		DxL	IMP.	R.C.	DxL	IMP.	R.C.
2.2					10x16	4.94	110
3.3		10x20	2.60	170	10x20	4.11	150
4.7		10x25	2.20	220	12.5x20	3.47	190
10		12.5x25	1.72	340	12.5x25	2.72	300
22		16x25	0.94	510	16x32	1.48	500
33		16x32	0.73	690	16x32	1.15	620
47		16x32	0.59	820	18x32	0.92	780
68		16x32	0.46	990			
100		18x32	0.38	1280			
120		18x36	0.32	1480			
150		18x40	0.26	1740			
180		18x40	0.23	1910			