

# CAPACITOR

## Aluminum Electrolytic Capacitor Series

### KLS10 - CD11L (ML) Series

#### Low Leakage Current

Low leakage current, high stable and reliable performance

D $\geq$ 8mm equipped with pressure release device.

Be used widely in DC or pulse circuit of colour TV sets, VCD, audio systems, telecommunications and computers.



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Item	Characteristics									
Size and its tolerance		Ø D	5	6	8	10	12	13	16	18
	F ± 0.5	2.0	2.5	3.5		5.0			7.5	
	d ± 0.1		0.5			0.6			0.8	
Operating Temp. Range	-40°C ~ +85°C									
Rated Working Voltage	6.3~100Vdc									
Capacitance Range	1.0~4700 μF (+20°C, 100 or 120Hz)									
Capacitance Tol.	$\pm 20\%, {}^{+30}_{-10} \text{ } (\text{+20°C, 100 or 120Hz})$									
Dissipation Factor tg δ	At +20°C, 100 or 120Hz, for CR>1000 μF, tg δ add 0.02 per another 1000 μF.									
	UR (V)	6.3	10	16	25	35	50	63	100	
	tgδ	0.24	0.20	0.20	0.14	0.12	0.10	0.09	0.08	
Leakage Current IL	$\leq 0.002 \cdot C_R \cdot U_R$ or $1 \mu A$ ( $\geq 160$ Vdc) whichever is greater At+20°C after 2 minutes application of UR .									
Load Life	At +85°C, after UR applied for 1000 hours.									
	△C	$\pm 20\%$ of initial measured value								
	DF(tg δ )	$\leq 150\%$ of initial specified value								
	LC(IL)	$\leq$ initial specified value								
Shelf Life	At+85°C, after shelf for 500 hours (without voltage applied), then restored for 16 hours at room temp.									
	△C	$\pm 20\%$ of initial measured value								
	DF(tg δ )	$\leq 150\%$ of initial specified value								
	LC(IL)	$\leq 200\%$ of initial specified value								

#### Case Size of Standard Products

CR UR(V) (μF)	6.3	10	16	25	35	50	63	100
1.0						5×11		5×11
2.2						5×11		5×11
3.3						5×11		5×11
4.7						5×11	5×11	6×11
10			5×11	5×11	5×11	5×11	5×11	6×12
22		5×11	5×11	5×11	5×11	6×11	6×12	8×12
33		5×11	5×11	5×11	6×11	6×12	8×12	10×13
47	5×11	5×11	5×11	6×11	6×12	8×11	8×12	10×17
100	5×11	6×11	6×12	6×12	8×12	10×13	10×15	12×22
220	6×12	6×12	8×12	10×13	8×14	10×20	12×22	16×27
330	6×12	8×12	10×13	10×15	10×17	12×22	12×26	16×31
470	8×12	10×13	10×15	10×17	12×22	13×26	16×27	18×36
1000	10×13	10×17	12×22	13×22	13×26	16×31	16×35	
2200	12×22	13×22	13×26	16×27	16×35	18×41		
3300	13×22	13×26	16×27	16×35				
4700	13×26	16×27	16×31					

Note: We can also provide the capacitors according to the customer's request.