

## CM 7mmL standard(CD11C Series)

Be 7mm in height, for general purpose, standard size.  
Used in car audio, cassette tape recorders, pocket calculator circuits, etc.



### Specifications

Item	Characteristics								
Size and its tolerance 	$\varnothing D$	4	5	6	8	$\geq \varnothing 8$ with safety vent PVC sleeve			
	$F \pm 0.5$	1.5	2.0	2.5	3.5				
	$\varnothing d \pm 0.1$	0.45			0.5				
	$\varnothing$	0.5							
	$\delta$	0.3							
Operating temperature range	-40~+85°C								
Rated voltage range	6.3V~63V <sub>DC</sub>								
Nominal capacitance range	0.1 $\mu$ F ~330 $\mu$ F								
Capacitance tolerance	$\pm 20\%$ (100Hz 20°C)								
Leakage current(20°C)	1 $\leq 0.01CV$ or 3 $\mu$ A (whichever is greater) after 1 minute								
	1. Leakage current C: Nominal capacitance V: Rated voltage								
(tg $\delta$ ) Dissipation factor(20°C 100Hz)	Rated voltage(V)	6.3	10	16	25	35	50	63	100Hz 20°C
	tg $\delta$	0.24	0.20	0.16	0.14	0.12	0.10	0.10	
Temperature characteristics (Impedance ration at 100Hz)	Rated voltage(V)	6.3	10	16	25	35	50	63	100Hz
	$Z_{-25^{\circ}\text{C}}/Z_{+20^{\circ}\text{C}}$	4	3	2	2	2	2	2	
	$Z_{+40^{\circ}\text{C}}/Z_{+20^{\circ}\text{C}}$	8	6	4	4	3	3	3	
Endurance	After applying rated voltage for 1000 hours at 85°C, and then resumed 16 hours:								
	Capacitance change	Within $\pm 20\%$ of the initial measured value							
	tg $\delta$	$\leq 150\%$ of the initial specified value							
	Leakage current	$\leq$ initial specified value							
Shelf life	After storage for 500 hours at 85°C the resumed 16 hours:								
	Capacitance change	Within $\pm 20\%$ of the initial measured value							
	tg $\delta$	$\leq 150\%$ of the initial specified value							
	Leakage current	$\leq 200\%$ initial specified value							

### Case size table

D X L (mm)

WV(V) C( $\mu$ F)	D X L (mm)															
	6.3	10		16		25		35		50		63				
CODE	0J	1A		1C		1E		1V		1H		1J				
0.1	0R1										4 X 7	0.8				
0.22	R22										4 X 7	2.0				
0.33	R33										4 X 7	3.0				
0.47	R47										4 X 7	4.0				
1	010										4 X 7	8.5	4 X 7	11		
2.2	2R2								4 X 7	13	4 X 7	14	4 X 7	16		
3.3	3R3						4 X 7	13	4 X 7	16	4 X 7	17	5 X 7	20		
4.7	4R7				4 X 7	16	4 X 7	16	4 X 7	19	5 X 7	22	6 X 7	26		
10	100		4 X 7	21	4 X 7	24	4 X 7	19	5 X 7	29	6 X 7	34	8 X 7	40		
22	220	4 X 7	29	5 X 7	33	5 X 7	37	5 X 7	29	6 X 7	45	8 X 7	53			
33	330	5 X 7	37	5 X 7	41	6 X 7	48	6 X 7	45	8 X 7	59					
47	470	5 X 7	44	6 X 7	51	6 X 7	57	8 X 7	59							
100	101	6 X 7	68	6 X 7	75	8 X 7	89									
220	221	6 X 7	101	8 X 7	118											
330	331	8 X 7	132													
													$\varnothing D \times L$	(mA)		