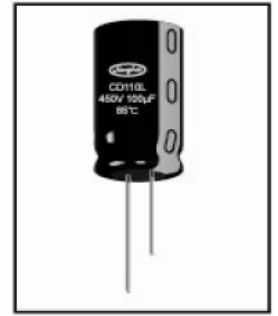
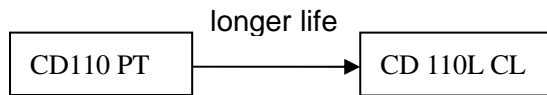


8000h at 85°C

- Load life
- High ripple current



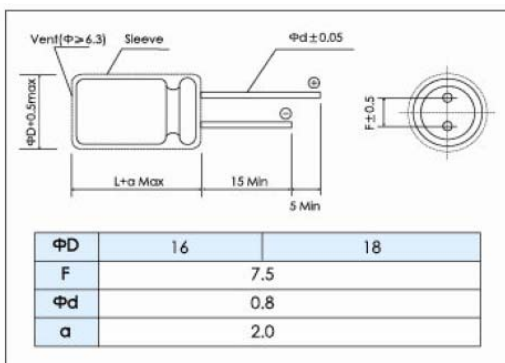
Items	Characteristics			
Operating Temperature Range(°C)	-25 ~ +85			
Voltage Range (V)	420 ~ 500			
Capacitance Range(μF)	47 ~ 150			
Capacitance Tolerance (20°C,120Hz)	± 20%			
Leakage Current (μA)	After 1 minute at 20°C application of rated voltage, leakage current is not more than 0.04CV+100 C: Nominal Capacitance(μF) V: Rated Voltage(V)			
Dissipation Factor (20°C, 120Hz)	Wv (V)	420	450	500
	tan δ (max)	20		
Stability at Low Temperature (Impedance Ratio at 120Hz)	Wv(V)	420-500		
	Z <sub>25°C</sub> / Z <sub>+20°C</sub>	8		

	Useful Life	Load Life	Endurance Test	Shelf Life
Lifetime	10000h	8000h	8000h	1000h
Leakage Current	Not more than specified value	Not more than specified value	Not more than specified value	Not more than specified value
Capacitance Change	Within ±30% of initial value	Within ±20% of initial value	Within ±20% of initial value	Within ±20% of initial value
Dissipation Factor	Not more than 300% of specified value	Not more than 200% of specified value	Not more than 200% of specified value	Not more than 200% of specified value
Condition: Applied Voltage Applied Current Applied Temperature	U <sub>R</sub> I <sub>R</sub> 85°C	U <sub>R</sub> I <sub>R</sub> 85°C	U <sub>R</sub> I <sub>R</sub> = 0 85°C	U <sub>R</sub> = 0 I <sub>R</sub> = 0 85°C  After test: U <sub>R</sub> to be applied for 30min>24h before measurement

## Dimensions

mm

## Frequency coefficient



Frequency	50/60Hz	120Hz	1kHz	10kHz	50kHz	100kHz
Coefficient	0.8	1.0	1.3	1.4	1.9	2.0

## Temperature Coefficient

Temperature(°C)	+70	+85
Coefficient	1.35	1

## Ratings for CD110L CL Series

$U_R$ (Surge Voltage) Code	Rated Capacitance	Max. ESR 20°C, 120Hz	Typ ESR 20°C, 120Hz	Rated Ripple Current 85°C, 120Hz	Size $\Phi D \times L$	P/N
(v)	( $\mu F$ )	( $\Omega$ )	( $\Omega$ )	(mA <sub>RMS</sub> )	(mm)	-
420 (470) 2X	47	5.6	3.9	440	16x31.5	ECR2XCL470M□□160031
	68	3.9	2.7	565	16x36	ECR2XCL680M□□160036
	68	3.9	2.7	565	18x31.5	ECR2XCL680M□□180031
	82	3.2	2.2	630	16x40	ECR2XCL820M□□160040
	82	3.2	2.2	630	18x31.5	ECR2XCL820M□□180031
	100	2.7	1.9	730	16x45	ECR2XCL101M□□160045
	100	2.7	1.9	730	18x36	ECR2XCL101M□□180036
	120	2.2	1.5	850	16x50	ECR2XCL121M□□160050
	120	2.2	1.5	850	18x40	ECR2XCL121M□□180040
	150	1.8	1.3	940	16x60	ECR2XCL151M□□160060
	150	1.8	1.3	940	18x46	ECR2XCL151M□□180046
450 (500) 2W	47	5.6	3.9	440	16x31.5	ECR2WCL470M□□160031
	68	3.9	2.7	565	16x36	ECR2WCL680M□□160036
	68	3.9	2.7	580	18x31.5	ECR2WCL680M□□180031
	82	3.2	2.2	630	16x40	ECR2WCL820M□□160040
	82	3.2	2.2	640	18x31.5	ECR2WCL820M□□180031
	100	2.7	1.9	730	16x45	ECR2WCL101M□□160045
	100	2.7	1.9	750	18x36	ECR2WCL101M□□180036
	120	2.2	1.5	850	16x50	ECR2WCL121M□□160050
	120	2.2	1.5	860	18x40	ECR2WCL121M□□180040
	150	1.8	1.3	940	16x60	ECR2WCL151M□□160060
	150	1.8	1.3	940	18x46	ECR2WCL151M□□180046
500 (550) 2H	47	5.6	3.9	400	16x36	ECR2HCL470M□□160036
	47	5.6	3.9	420	18x31.5	ECR2HCL470M□□180031
	68	3.9	2.7	520	16x45	ECR2HCL680M□□160045
	68	3.9	2.7	540	18x36	ECR2HCL680M□□180036
	82	3.2	2.2	600	16x55	ECR2HCL820M□□160055
	82	3.2	2.2	610	18x40	ECR2HCL820M□□180040
	100	2.7	1.9	710	16x60	ECR2HCL101M□□160060
	100	2.7	1.9	720	18x46	ECR2HCL101M□□180046
	120	2.2	1.5	900	16x60	ECR2HCL121M□□160060

Customer products are available on request.

## Lifetime Diagram

