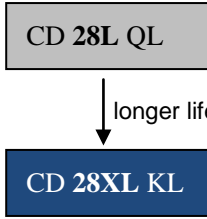




# CD28XL KL SERIES

10000h at 105°C

- Miniaturized Long Life
- Suited for LED Lighting

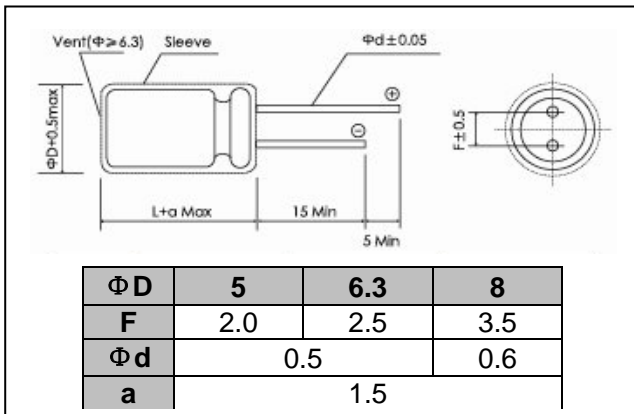


Items	Characteristics							
Operating Temperature Range(°C)	-25 ~ +105							
Voltage Range (V)	10 ~ 100							
Capacitance Range(µF)	0.47~330							
Capacitance Tolerance (20°C,120Hz)	±20%							
Leakage Current (µA)	After 2 minutes at 20°C application of rated voltage, leakage current is not more than 0.01CV or 3, whichever is greater C:Nominal Capacitance(µF) V:Rated Voltage(V)							
Dissipation Factor (20°C, 120Hz)	WV(V)	10	16	25	35	50	63	100
	Tan δ(max)	0.45	0.35	0.30	0.22	0.19	0.17	0.15
For Capacitances>1000µF add 0.02 to every 1000µF								
Stability at Low Temperature (Impedance Ratio at 120Hz)	Rated Voltage(V)	10	16	25	35	50	63	100
	Z <sub>-25°C/+20°C</sub>	8	6	4	4	3	3	3

	Useful Life		Load Life	Endurance Test	Shelf Life
Lifetime	12000h	≥11000h	10000h	10000h	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 ±25% of initial value	Within ±25% of initial value	Within ±20% of initial value
Dissipation Factor	Not more than 300% of specified value		Not more than 300% of specified value	Not more than 300% 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> 105°C	U <sub>R</sub> 1.4x I <sub>R</sub> 60°C	U <sub>R</sub> I <sub>R</sub> 105°C	U <sub>R</sub> I <sub>R</sub> = 0 105°C	U <sub>R</sub> = 0 I <sub>R</sub> = 0 105°C  After test: U <sub>R</sub> to be applied for 30min>24h before measurement

## Dimensions

mm



## Frequency Coefficient

Frequency Cap(µF)	120Hz	1kHz	10kHz	100kHz
0.47~10	0.42	0.60	0.80	1.00
22~33	0.55	0.75	0.90	1.00
47~330	0.70	0.85	0.95	1.00

## Temperature Coefficient

Temperature(°C)	+70	+85	+105
Coefficient	1.96	1.68	1.00



Ratings for CD 28XL KL Series

$U_R$ (Surge Voltage) Code	Rated Capacitance 20°C, 120Hz	Rated Ripple Current 105°C, 120Hz	Size $\Phi D \times L$	P/N
(v)	( $\mu F$ )	(mA rms)	(mm)	-
<b>10</b> (13) 1A	100	130	5x11.5	ECR1AKL101M□□050011
	220	210	6.3x11.5	ECR1AKL221M□□063011
	330	330	8x11.5	ECR1AKL331M□□080011
<b>16</b> (20) 1C	47	130	5x11.5	ECR1CKL101M□□050011
	100	210	6.3x11.5	ECR1CKL221M□□063011
	220	330	8x11.5	ECR1CKL331M□□080011
<b>25</b> (32) 1E	33	130	5x11.5	ECR1EKL330M□□050011
	47	130	5x11.5	ECR1EKL470M□□050011
	100	210	6.3x11.5	ECR1EKL101M□□063011
<b>35</b> (44) 1V	33	130	5x11.5	ECR1VKL330M□□050011
	47	210	6.3x11.5	ECR1VKL470M□□063011
	100	330	8x11.5	ECR1VKL101M□□080011
<b>50</b> (63) 1H	0.47	12	5x11.5	ECR1HKL47M□□050011
	1	25	5x11.5	ECR1HKL010M□□050011
	2.2	35	5x11.5	ECR1HKL2R2M□□050011
	3.3	70	5x11.5	ECR1HKL3R3M□□050011
	4.7	80	5x11.5	ECR1HKL4R7M□□050011
	10	90	5x11.5	ECR1HKL100M□□050011
	22	110	5x11.5	ECR1HKL220M□□050011
	33	190	6.3x11.5	ECR1HKL330M□□063011
	47	190	6.3x11.5	ECR1HKL470M□□063011
	100	270	8x11.5	ECR1HKL101M□□080011
<b>63</b> (79) 1J	10	80	5x11.5	ECR1JKL100M□□050011
	22	170	6.3x11.5	ECR1JKL220M□□063011
	33	170	6.3x11.5	ECR1JKL330M□□063011
	47	240	8x11.5	ECR1JKL470M□□080011
<b>100</b> (125) 2A	0.47	20	5x11.5	ECR2AKL47M□□050011
	1	40	5x11.5	ECR2AKL010M□□050011
	2.2	50	5x11.5	ECR2AKL2R2M□□050011
	3.3	60	5x11.5	ECR2AKL3R3M□□050011
	4.7	70	5x11.5	ECR2AKL4R7M□□050011
	10	150	6.3x11.5	ECR2AKL100M□□063011
	22	230	8x11.5	ECR2AKL220M□□080011

Customer products are available on request.