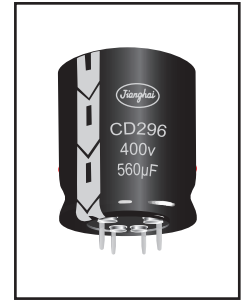
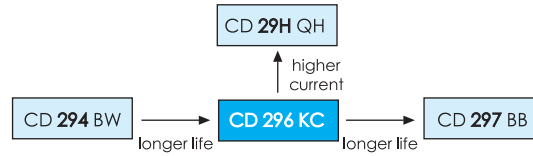


3000h at 105°C

- Long Life at High Temperature
- High Ripple Current
- Professional Power Supplies



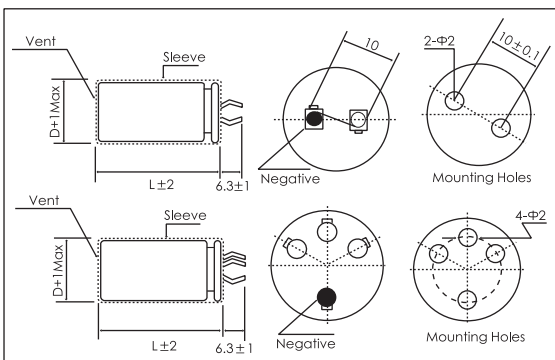
SNAP-IN/LUG

Items	Characteristics		
Operating Temperature Range (°C)	-40 ~ +105	-25 ~ +105	
Voltage Range (V)	16 ~ 100	160 ~ 550	
Capacitance Range (µF)	56 ~ 47000		
Capacitance Tolerance (20°C, 120Hz)	± 20%		
Leakage Current (µA)	After 5 minutes at 20°C application of rated voltage, leakage current is not more than 0.01CV or 1.5mA, whichever is smaller. C: Nominal Capacitance (µF) V: Rated Voltage (V)		
Dissipation Factor (20°C, 120Hz)	Rated Voltage (V)	16 25 35 50 63~100 160~400 420~550	
	Tan δ (max)	0.50 0.40 0.35 0.30 0.20 0.15 0.20	
Stability at Low Temperature (Impedance Ratio at 120Hz)	Rated Voltage (V)	16~100 160~200 250~550	
	$Z_{-25°C} / Z_{+20°C}$	4	
	$Z_{-40°C} / Z_{+20°C}$	15	-

	Useful Life		Load Life	Endurance Test	Shelf Life
Lifetime	5000h	>200000h	3000h	4000h	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_R I_R 105°C	U_R $1.4 \times I_R$ 40°C	U_R I_R 105°C	U_R $I_R = 0$ 105°C	$U_R = 0$ $I_R = 0$ 105°C After test: U_R to be applied for 30min >24h before measurement

Dimensions

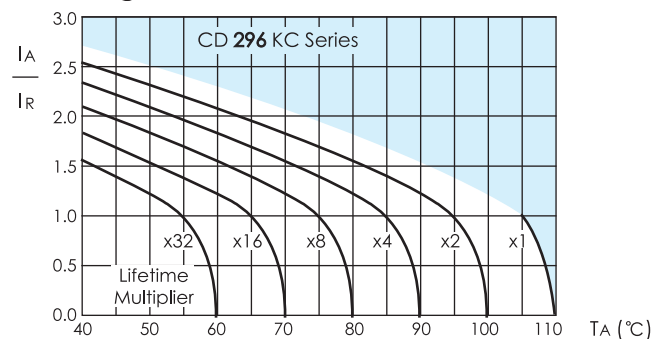
mm



Frequency Coefficient

Voltage (V)	Frequency					
	50/60Hz	120Hz	300Hz	1kHz	10kHz	≥50kHz
≤ 100	0.95	1.00	1.07	1.13	1.19	1.20
160 ~ 250	0.87	1.00	1.17	1.32	1.45	1.50
≥ 315	0.80	1.00	1.16	1.30	1.41	1.43

Lifetime Diagram



I_a = actual ripple current at 120Hz, I_r = rated ripple current at 120Hz, 105°C
Multiplier of Useful Life as a function of ambient temperature and ripple current load

Temperature Coefficient

Temperature(°C)	+40	+55	+70	+80	+105
Coefficient	2.7	2.5	2.1	1.7	1.00



CD 296 KC SERIES



Ratings for CD 296 KC Series

U _r (Surge Voltage) Code	Rated Capacitance	Max ESR 20°C,120Hz	Typ ESR 20°C,120Hz	Rated Ripple Current 105°C,120Hz	Size ΦD x L	P/N	
(V)	(μF)	(mΩ)	(mΩ)	(Arms)	(mm)	-	
420 (470) 2X	470	565	282	1.31	35 × 45	ECS2XKC471M□□350045	
	560	473	237	1.5	35 × 50	ECS2XKC561M□□350050	
	680	391	196	1.9	35 × 55	ECS2XKC681M□□350055	
	820	324	162	2.2	35 × 60	ECS2XKC821M□□350060	
450 (500) 2W	56	4739	2370	0.47	22 × 25	ECS2WKC560M□□220025	
	68	3903	1951	0.56	22 × 30	ECS2WKC680M□□220030	
		3903	1951	0.56	25 × 25	ECS2WKC680M□□250025	
	82	3237	1618	0.64	22 × 35	ECS2WKC820M□□220035	
	100	2654	1327	0.7	22 × 40	ECS2WKC101M□□220040	
		2654	1327	0.7	25 × 30	ECS2WKC101M□□250030	
	120	2212	1106	0.73	22 × 45	ECS2WKC121M□□220045	
		2212	1106	0.73	25 × 35	ECS2WKC121M□□250035	
	150	1769	885	0.80	22 × 50	ECS2WKC151M□□220050	
		1769	885	0.82	25 × 40	ECS2WKC151M□□250040	
		1769	885	0.83	30 × 30	ECS2WKC151M□□300030	
	180	1474	737	0.87	25 × 45	ECS2WKC181M□□250045	
		1474	737	0.86	30 × 35	ECS2WKC181M□□300035	
	220	1206	603	0.94	25 × 50	ECS2WKC221M□□250050	
		1206	603	0.95	30 × 40	ECS2WKC221M□□300040	
		1206	603	0.91	35 × 30	ECS2WKC221M□□350030	
	270	983	492	1.11	30 × 45	ECS2WKC271M□□300045	
		983	492	1.13	35 × 35	ECS2WKC271M□□350035	
	330	804	402	1.15	30 × 50	ECS2WKC331M□□300050	
		804	402	1.26	35 × 40	ECS2WKC331M□□350040	
	390	681	340	1.31	35 × 45	ECS2WKC391M□□350045	
	470	565	282	1.5	35 × 50	ECS2WKC471M□□350050	
	560	473	237	1.7	35 × 55	ECS2WKC561M□□350055	
	680	391	196	2.0	35 × 60	ECS2WKC681M□□350060	
		391	196	2.0	40 × 50	ECS2WKC681M□□400050	
	820	324	162	2.2	35 × 65	ECS2WKC821M□□350065	
		324	162	2.3	40 × 60	ECS2WKC821M□□400060	
	1000	265	139	2.6	35 × 75	ECS2WKC102M□□350075	
	500 (550) 2H	47	5647	2823	0.41	22 × 30	ECS2HKC470M□□220030
		56	4739	2370	0.47	22 × 30	ECS2HKC560M□□220030
		68	3903	1951	0.54	22 × 35	ECS2HKC680M□□220035
		82	3237	1618	0.62	22 × 40	ECS2HKC820M□□220040
3237			1618	0.62	25 × 30	ECS2HKC820M□□250030	
100		2654	1327	0.67	22 × 45	ECS2HKC101M□□220045	
		2654	1327	0.67	25 × 35	ECS2HKC101M□□250035	
120		2212	1106	0.77	22 × 50	ECS2HKC121M□□220050	
		2212	1106	0.74	25 × 40	ECS2HKC121M□□250040	
		2212	1106	0.77	30 × 30	ECS2HKC121M□□300030	
150		1769	885	0.82	25 × 45	ECS2HKC151M□□250045	
		1769	885	0.85	30 × 40	ECS2HKC151M□□300040	
		1769	885	0.85	35 × 35	ECS2HKC151M□□350035	
180		1474	737	0.98	25 × 50	ECS2HKC181M□□250050	
		1474	737	1.01	30 × 45	ECS2HKC181M□□300045	
220		1206	603	1.12	30 × 50	ECS2HKC221M□□300050	
		1206	603	1.12	35 × 35	ECS2HKC221M□□350035	
270		983	492	1.25	30 × 50	ECS2HKC271M□□300050	
		983	492	1.25	35 × 40	ECS2HKC271M□□350040	
330		804	402	1.36	35 × 45	ECS2HKC331M□□350045	
390		681	340	1.54	35 × 50	ECS2HKC391M□□350050	
470		565	282	1.69	35 × 60	ECS2HKC471M□□350060	
560		473	237	1.9	35 × 65	ECS2HKC561M□□350065	
680		391	196	2.2	35 × 70	ECS2HKC681M□□350070	
550 (600) 2Y	180	1474	737	1.06	30 × 50	ECS2YKC181M□□300050	
		1474	737	1.06	35 × 35	ECS2YKC181M□□350035	
	220	1206	603	1.18	30 × 55	ECS2YKC221M□□300055	
		1206	603	1.18	35 × 40	ECS2YKC221M□□350040	
	270	983	492	1.31	35 × 45	ECS2YKC271M□□350045	
	330	804	402	1.5	35 × 50	ECS2YKC331M□□350050	
	390	681	340	1.67	35 × 60	ECS2YKC391M□□350060	
	470	565	282	1.95	35 × 70	ECS2YKC471M□□350070	
	560	473	237	2.1	35 × 80	ECS2YKC561M□□350080	
		473	237	2.1	40 × 70	ECS2YKC561M□□400070	

Customer products are available on request.

