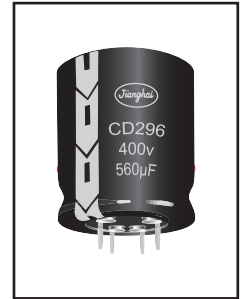
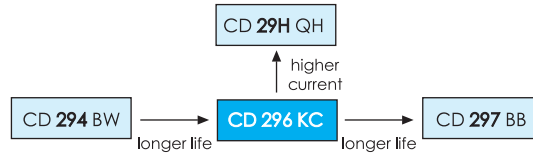


3000h at 105°C

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



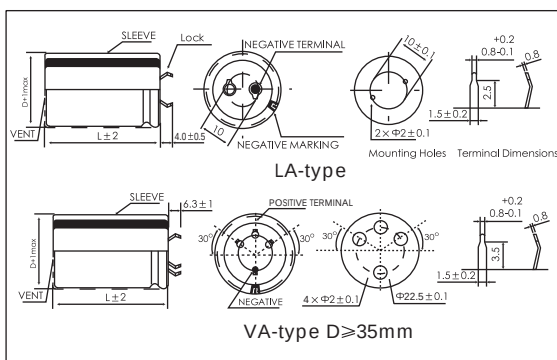
SNAP-IN/LUG

Items	Characteristics		
Operating Temperature Range (°C)	-25 ~ +105		
Voltage Range (V)	200 ~ 550		
Capacitance Range (μF)	100 ~ 2200		
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)	200~400	420~550
	Tan δ (max)	0.15	0.20
Stability at Low Temperature (Impedance Ratio at 120Hz)	Rated Voltage (V)	200~550	
	Z _{-25°C} / Z _{+20°C}	4	

	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 × I _R 40°C	U _R I _R 105°C	U _R I _R = 0 105°C	After test: U _R to be applied for 30min >24h before measurement

Dimensions

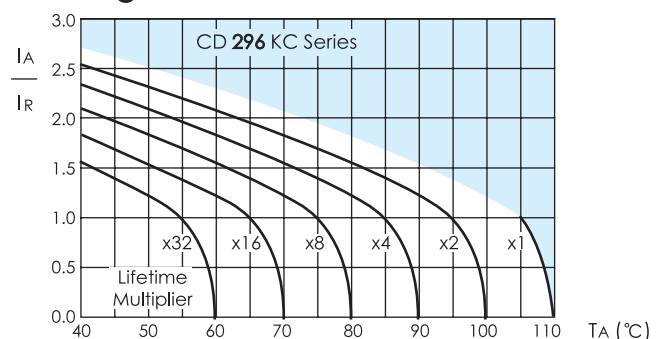
mm



Frequency Coefficient

Frequency Voltage (V)	50/60Hz	120Hz	300Hz	1kHz	10kHz	≥50kHz
200 ~ 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	+85	+105
Coefficient	2.7	2.5	2.1	1.7	1.00

CD 296 KC SERIES



SNAP-IN/LUG

Ratings for CD 296 KC Series

U _r (Surge Voltage) Code	Rated Capa- cance	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)	-
200 (250) 2D	470	424	296	1.47	25 × 30	ECS2DKC471M□□250030
		424	296	1.56	30 × 25	ECS2DKC471M□□300025
	560	355	249	1.6	25 × 35	ECS2DKC561M□□250035
		355	249	1.65	30 × 30	ECS2DKC561M□□300030
	680	293	205	1.8	25 × 40	ECS2DKC681M□□250040
		293	205	1.82	30 × 30	ECS2DKC681M□□300030
	820	243	170	1.99	30 × 35	ECS2DKC821M□□300035
	1000	199	139	2.17	22 × 50	ECS2DKC102M□□220050
		199	139	2.21	30 × 40	ECS2DKC102M□□300040
	1200	166	116	2.28	25 × 45	ECS2DKC122M□□250045
		166	116	2.32	30 × 40	ECS2DKC122M□□300040
	1500	133	93	2.59	30 × 50	ECS2DKC152M□□300050
		133	93	2.59	35 × 40	ECS2DKC152M□□350040
	1800	111	77	2.7	35 × 45	ECS2DKC182M□□350045
	2200	91	63	3.23	35 × 50	ECS2DKC222M□□350050
250 (300) 2E	330	603	422	1.2	22 × 40	ECS2EKC331M□□220040
		603	422	1.3	25 × 30	ECS2EKC331M□□250030
	390	510	357	1.42	25 × 35	ECS2EKC391M□□250035
		424	296	1.47	25 × 40	ECS2EKC471M□□250040
	470	424	296	1.51	30 × 30	ECS2EKC471M□□300030
		355	249	1.59	25 × 45	ECS2EKC561M□□250045
	560	355	249	1.61	30 × 30	ECS2EKC561M□□300030
		293	205	1.66	25 × 50	ECS2EKC681M□□250050
	680	293	205	1.76	30 × 35	ECS2EKC681M□□300035
		243	170	1.83	30 × 40	ECS2EKC821M□□300040
	820	243	170	1.82	35 × 35	ECS2EKC821M□□350035
		199	139	1.87	30 × 50	ECS2EKC102M□□300050
	1000	199	139	1.99	35 × 40	ECS2EKC102M□□350040
		166	116	2.1	35 × 45	ECS2EKC122M□□350045
	1500	133	93	2.7	35 × 50	ECS2EKC152M□□350050
	1800	111	77	2.9	35 × 55	ECS2EKC182M□□350055
		111	77	2.92	35 × 60	ECS2EKC182M□□350060
315 (365) 2F	180	1106	608	0.78	22 × 40	ECS2FKC181M□□220040
		1106	608	0.85	25 × 25	ECS2FKC181M□□250025
	220	905	498	0.91	22 × 45	ECS2FKC221M□□220045
		905	498	0.94	25 × 30	ECS2FKC221M□□250030
	270	737	406	1	25 × 35	ECS2FKC271M□□250035
		737	406	0.98	30 × 25	ECS2FKC271M□□300025
	330	603	332	1.13	30 × 30	ECS2FKC331M□□300030
		510	281	1.2	30 × 35	ECS2FKC391M□□300035
	470	424	233	1.28	30 × 35	ECS2FKC471M□□300035
		355	196	1.46	30 × 40	ECS2FKC561M□□300040
	680	293	161	1.85	30 × 45	ECS2FKC681M□□300045
		293	161	1.88	35 × 35	ECS2FKC681M□□350035
	820	242	133	2.1	30 × 50	ECS2FKC821M□□300050
		242	133	2.15	35 × 40	ECS2FKC821M□□350040
	1000	199	109	2.42	30 × 55	ECS2FKC102M□□300055
		199	109	2.47	35 × 45	ECS2FKC102M□□350045
	1200	166	91	2.6	35 × 50	ECS2FKC122M□□350050
400 (450) 2G	120	1659	863	0.66	22 × 30	ECS2GKC121M□□220030
		1659	863	0.68	25 × 25	ECS2GKC121M□□250025
	150	1327	690	0.73	25 × 30	ECS2GKC151M□□250030
		1327	690	0.75	30 × 25	ECS2GKC151M□□300025
	180	1106	575	0.78	22 × 35	ECS2GKC181M□□220035
		1106	575	0.83	30 × 30	ECS2GKC181M□□300030
	220	905	471	0.87	25 × 40	ECS2GKC221M□□250040
		905	471	0.96	30 × 30	ECS2GKC221M□□300030
	270	737	383	0.94	22 × 50	ECS2GKC271M□□220050
		737	383	0.95	30 × 35	ECS2GKC271M□□300035
	330	603	314	1.11	25 × 50	ECS2GKC331M□□250050
		603	314	1.06	30 × 35	ECS2GKC331M□□300035
	390	510	265	1.15	30 × 40	ECS2GKC391M□□300040
		510	265	1.26	35 × 35	ECS2GKC391M□□350035
	470	424	220	1.28	30 × 50	ECS2GKC471M□□300050
		424	220	1.31	35 × 40	ECS2GKC471M□□350040
450 (500) 2W	560	355	185	1.5	30 × 50	ECS2GKC561M□□300050
		355	185	1.65	35 × 45	ECS2GKC561M□□350045
	680	293	153	1.9	35 × 50	ECS2GKC681M□□350050
		242	126	2.2	35 × 60	ECS2GKC821M□□350060
	1000	199	109	2.5	30 × 70	ECS2GKC102M□□300070
		199	109	2.6	35 × 65	ECS2GKC102M□□350065
	120	2212	1106	0.73	25 × 25	ECS2WKC121M□□250025
		1769	885	0.82	25 × 30	ECS2WKC151M□□250030
	180	1474	737	0.86	30 × 30	ECS2WKC181M□□300030
		1206	603	0.94	25 × 45	ECS2WKC221M□□250045
	220	1206	603	0.95	30 × 30	ECS2WKC221M□□300030
		983	492	1.11	30 × 30	ECS2WKC271M□□300030
	270	983	492	1.15	30 × 35	ECS2WKC271M□□300035
		804	402	1.25	30 × 40	ECS2WKC331M□□300040
	330	804	402	1.26	35 × 30	ECS2WKC331M□□350030
		681	340	1.31	30 × 40	ECS2WKC391M□□300040
	390	681	340	1.35	30 × 45	ECS2WKC391M□□300045
		681	340	1.36	35 × 35	ECS2WKC391M□□350035
	470	565	282	1.5	30 × 50	ECS2WKC471M□□300050

U _r (Surge Voltage) Code	Rated Capa- cance	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)	-
450 (500) 2W	470	565	282	1.55	35 × 45	ECS2WKC471M□□350045
	560	473	237	1.65	30 × 50	ECS2WKC561M□□300050
		473	237	1.7	35 × 50	ECS2WKC561M□□350050
		391	196	1.95	35 × 50	ECS2WKC681M□□350050
	680	391	196	2	35 × 60	ECS2WKC681M□□350060
		324	162	2.15	35 × 60	ECS2WKC821M□□350060
		324	162	2.2	35 × 65	ECS2WKC821M□□350065
	1000	265	139	2.6	35 × 70	ECS2WKC102M□□350070
	100	2654	1327	0.67	22 × 35	ECS2HKC101M□□220035
	120	2212	1106	0.77	22 × 50	ECS2HKC121M□□220050
2212		1106	0.81	25 × 35	ECS2HKC121M□□250035	
500 (550) 2H	150	1769	885	0.82	25 × 40	ECS2HKC151M□□250040
		1769	885	0.85	30 × 30	ECS2HKC151M□□300030
	180	1474	737	0.98	25 × 50	ECS2HKC181M□□250050
		1474	737	1.01	30 × 35	ECS2HKC181M□□300035
	220	1206	603	1.12	30 × 35	ECS2HKC221M□□300035
		1206	603	1.18	35 × 30	ECS2HKC221M□□350030
	270	983	492	1.25	30 × 40	ECS2HKC271M□□300040
		983	492	1.29	35 × 35	ECS2HKC271M□□350035
	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	
550 (600) 2Y	560	473	237	1.9	35 × 65	ECS2HKC561M□□350065
	680	391	196	2.2	35 × 70	ECS2HKC681M□□350070
	150	1769	885	0.86	30 × 35	ECS2YKC151M□□300035
	180	1474	737	1.06	30 × 40	ECS2YKC181M□□300040
		1474	737	1.11	35 × 30	ECS2YKC181M□□350030
	220	1206	603	1.18	30 × 50	ECS2YKC221M□□300050
		1206	603	1.23	35 × 35	ECS2YKC221M□□350035
	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	1.9	35 × 60	ECS2YKC471M□□350060	
560	565	282	1.95	35 × 70	ECS2YKC471M□□350070	
560	473	237	2.1	35 × 80	ECS2YKC561M□□350080	

Customer products are available on request.