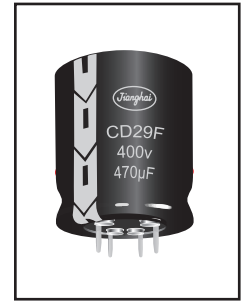
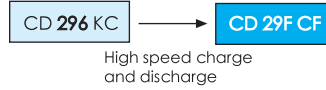


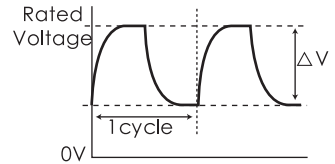
3000h at 105°C

- Long Life at High Temperature
- High Ripple Current
- Suit for high frequency regenerative voltage for AC servomotor, general inverter.



SNAP-IN/LUG

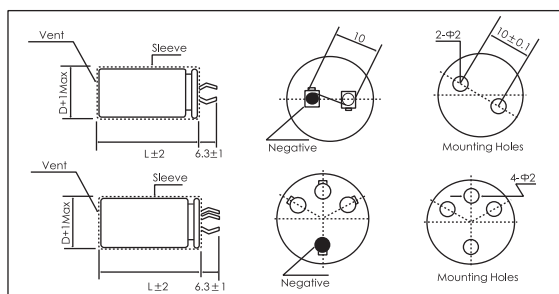
Items	Characteristics			
Operating Temperature Range (°C)	-25 ~ +105			
Voltage Range (V)	350 ~ 450			
Capacitance Range (µF)	120 ~ 820			
Capacitance Tolerance (20°C, 120Hz)	± 20%			
Leakage Current (µA)	After 5 minutes at 20°C application of rated voltage, leakage current is not more than 0.01CV or 1.5mA, whichever is smaller. C: Nominal Capacitance (µF) V: Rated Voltage (V)			
Dissipation Factor (20°C, 120Hz)	Rated Voltage (V)	350	400	450
	Tan δ (max)	0.15		
Charge and discharge	After an application of charge and discharge with the voltage waveform shown below, for 50million times (charge and discharge voltage difference ΔV=rated voltage×0.35,cycle 3Hz) at 15~35°C, the capacitor shall meet the following specifications.			
	Capacitance Change	Within ± 20% of initial value		
	Tan δ	200% or less of initial specified value		
	Leakage Current	Initial specified value or less		
Appearance	There shall be found to no remarkable abnormality on the capacitor			
Stability at Low Temperature (Impedance Ratio at 120Hz)	Rated Voltage (V)	350	400	450
	Z _{-25°C} / Z _{+20°C}	8		



Lifetime	Useful Life		Load Life	Endurance Test	Shelf Life
	6000h	≥ 200000h	3000h	3000h	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(Hz)	50/60	120	300	1K	10K	≥ 50K
Factor	0.80	1.00	1.16	1.30	1.41	1.45

Temperature Coefficient

Temperature(°C)	40	55	70	80	105
Factor	2.7	2.5	2.1	1.7	1.0



CD 29F CF SERIES



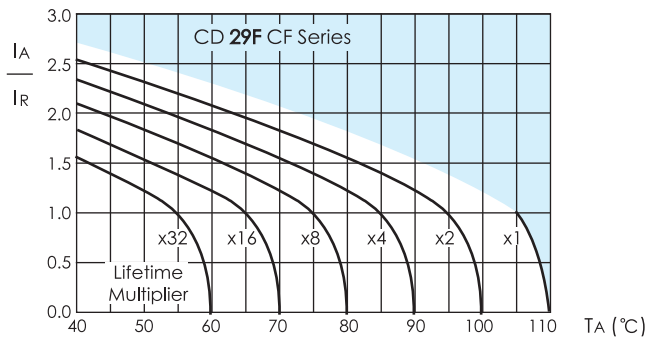
Ratings for CD 29F CF Series

SNAP-IN/LUG

U_r (Surge Voltage) Code	Rated Capacitance	Max ESR 20°C, 120Hz	Typ ESR 20°C, 120Hz	Rated Ripple Current 105°C, 120Hz	Size $\Phi D \times L$	P/N	
(V)	(μF)	(m Ω)	(m Ω)	(Arms)	(mm)	-	
350 (400) 2V	150	1327	487	0.89	22 × 35	ECS2VCF151M□□220035	
		1327	487	0.89	25 × 30	ECS2VCF151M□□250030	
	180	1106	405	0.92	22 × 35	ECS2VCF181M□□220035	
		1106	405	0.92	25 × 30	ECS2VCF181M□□250030	
	220	905	332	1.05	22 × 40	ECS2VCF221M□□220040	
			332	1.05	25 × 35	ECS2VCF221M□□250035	
		905	332	1.05	30 × 30	ECS2VCF221M□□300030	
	270	737	270	1.10	22 × 45	ECS2VCF271M□□220045	
			270	1.10	25 × 40	ECS2VCF271M□□250040	
		737	270	1.10	30 × 30	ECS2VCF271M□□300030	
	330	603	221	1.21	22 × 50	ECS2VCF331M□□220050	
			221	1.21	25 × 45	ECS2VCF331M□□250045	
		603	221	1.21	30 × 40	ECS2VCF331M□□300040	
	390	510	177	1.32	25 × 50	ECS2VCF391M□□250050	
			177	1.32	30 × 45	ECS2VCF391M□□300045	
		510	177	1.32	35 × 35	ECS2VCF391M□□350035	
	470	423	147	1.40	30 × 45	ECS2VCF471M□□300045	
			147	1.40	35 × 40	ECS2VCF471M□□350040	
	560	355	123	1.50	30 × 50	ECS2VCF561M□□300050	
			123	1.50	35 × 45	ECS2VCF561M□□350045	
680	293	101	1.72	35 × 45	ECS2VCF681M□□350045		
820	243	89	1.95	35 × 50	ECS2VCF821M□□350050		
400 (450) 2G	150	1327	487	0.85	22 × 35	ECS2GCF151M□□220035	
		1106	405	0.95	22 × 40	ECS2GCF181M□□220040	
	220	905	332	1.05	22 × 45	ECS2GCF221M□□220045	
			332	1.05	25 × 40	ECS2GCF221M□□250040	
	270	737	270	1.22	22 × 50	ECS2GCF271M□□220050	
			270	1.22	25 × 45	ECS2GCF271M□□250045	
		737	270	1.22	30 × 40	ECS2GCF271M□□300040	
	330	603	201	1.45	25 × 50	ECS2GCF331M□□250050	
			201	1.45	30 × 40	ECS2GCF331M□□300040	
		510	170	1.55	30 × 45	ECS2GCF391M□□300045	
	390	510	170	1.55	35 × 40	ECS2GCF391M□□350040	
			423	136	1.75	30 × 50	ECS2GCF471M□□300050
		423	136	1.75	35 × 45	ECS2GCF471M□□350045	
	560	355	114	1.92	35 × 45	ECS2GCF561M□□350045	
	680	293	88	2.12	35 × 50	ECS2GCF681M□□350050	
	450 (500) 2W	120	1659	608	0.72	22 × 35	ECS2WCF121M□□220035
		150	1327	487	0.79	22 × 40	ECS2WCF151M□□220040
			1106	405	0.88	22 × 45	ECS2WCF181M□□220045
		180	1106	405	0.88	25 × 40	ECS2WCF181M□□250040
				905	332	1.04	25 × 45
220		905	332	1.04	30 × 40	ECS2WCF221M□□300040	
			737	270	1.25	25 × 50	ECS2WCF271M□□250050
270		737	270	1.25	30 × 45	ECS2WCF271M□□300045	
			603	201	1.37	30 × 45	ECS2WCF331M□□300045
390		510	170	1.60	35 × 40	ECS2WCF391M□□350040	
470		423	136	1.80	30 × 50	ECS2WCF471M□□300050	
			423	136	1.80	35 × 45	ECS2WCF471M□□350045
560	355	114	2.00	35 × 50	ECS2WCF561M□□350050		

Customer products are available on request.

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

