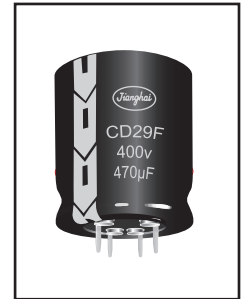
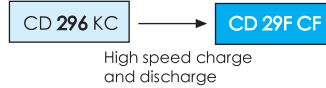


CD 29F CF SERIES

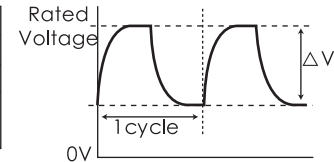


3000h at 105°C

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



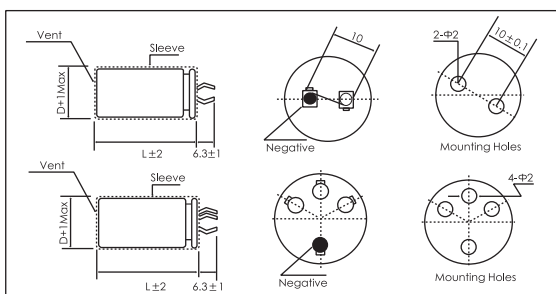
Items	Characteristics			
Operating Temperature Range (°C)	-25 ~ +105			
Voltage Range (V)	350 ~ 450			
Capacitance Range (µF)	120 ~ 820			
Capacitance Tolerance (20°C, 120Hz)	± 20%			
Leakage Current (µA)	After 5 minutes at 20°C application of rated voltage, leakage current is not more than 0.01CV or 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	U _R = 0 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

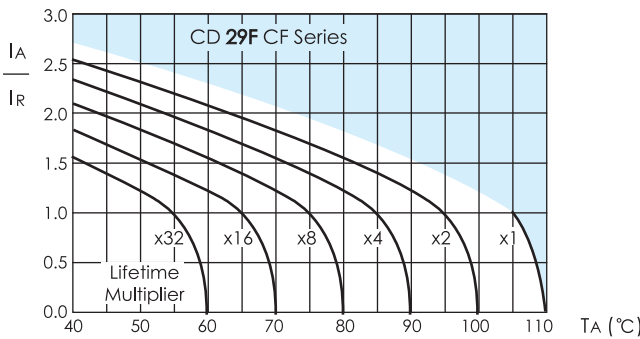
Ratings for CD 29F CF Series

U_r (Surge Voltage) Code	Rated Capacitance	Max ESR 20°C, 120Hz	Typ ESR 20°C, 120Hz	Rated Ripple Current 105°C, 120Hz	Size $\Phi D \times L$	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
		905	332	1.05	25×35	ECS2VCF221M□□250035
		905	332	1.05	30×30	ECS2VCF221M□□300030
	270	737	270	1.10	22×45	ECS2VCF271M□□220045
		737	270	1.10	25×40	ECS2VCF271M□□250040
		737	270	1.10	30×30	ECS2VCF271M□□300030
	330	603	221	1.21	22×50	ECS2VCF331M□□220050
		603	221	1.21	25×45	ECS2VCF331M□□250045
		603	221	1.21	30×40	ECS2VCF331M□□300040
	390	510	177	1.32	25×50	ECS2VCF391M□□250050
		510	177	1.32	30×45	ECS2VCF391M□□300045
		510	177	1.32	35×35	ECS2VCF391M□□350035
	470	423	147	1.40	30×45	ECS2VCF471M□□300045
		423	147	1.40	35×40	ECS2VCF471M□□350040
	560	355	123	1.50	30×50	ECS2VCF561M□□300050
		355	123	1.50	35×45	ECS2VCF561M□□350045
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
		905	332	1.05	25×40	ECS2GCF221M□□250040
	270	737	270	1.22	22×50	ECS2GCF271M□□220050
		737	270	1.22	25×45	ECS2GCF271M□□250045
	330	603	201	1.45	25×50	ECS2GCF331M□□250050
		603	201	1.45	30×40	ECS2GCF331M□□300040
	390	510	170	1.55	30×45	ECS2GCF391M□□300045
		510	170	1.55	35×40	ECS2GCF391M□□350040
470	423	136	1.75	30×50	ECS2GCF471M□□300050	
	423	136	1.75	35×45	ECS2GCF471M□□350045	
450 (500) 2W	120	1659	608	0.72	22×35	ECS2WCF121M□□220035
		1327	487	0.79	22×40	ECS2WCF151M□□220040
	180	1106	405	0.88	22×45	ECS2WCF181M□□220045
		1106	405	0.88	25×40	ECS2WCF181M□□250040
	220	905	332	1.04	25×45	ECS2WCF221M□□250045
		905	332	1.04	30×40	ECS2WCF221M□□300040
	270	737	270	1.25	25×50	ECS2WCF271M□□250050
		737	270	1.25	30×45	ECS2WCF271M□□300045
	330	603	201	1.37	30×45	ECS2WCF331M□□300045
		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	

SNAP-IN/LUG

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