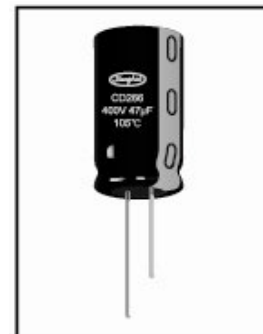
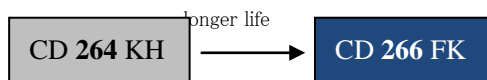


CD 266 FK Series



5000h at 105°C

- Polarized aluminum electrolytic capacitors, non-solid
- Pressure relief
- Long useful life: 10000 hours at 105°C
- High rated voltage, up to 500V
- High-reliability and professional applications
- Lighting, monitors, general industrial
- Filtering of high voltages in power supplies



Items	Characteristics																															
Operating Temperature Range(°C)	-40~+105	-25~+105																														
Voltage Range (V)	160-250	350-500																														
Capacitance Range(μF)	1~220																															
Capacitance Tolerance (20°C, 120Hz)	±20%																															
Leakage Current (μA)	After 1 minutes at 20°C application of rated voltage, leakage current is not more than: $CV \leq 1000: I \leq 0.06 \quad CV+40$ $CV > 1000: I \leq 0.03 \quad CV+70$ C: Nominal Capacitance(μF) V: Rated Voltage(V)																															
Dissipation Factor (20°C, 120Hz)	<table border="1"> <tr> <td>WV(V)</td> <td>160</td> <td>200</td> <td>250</td> <td>350</td> <td>400</td> <td>420</td> <td>450</td> <td>500</td> </tr> <tr> <td>Tan δ(max)</td> <td colspan="3">0.12</td> <td colspan="2">0.15</td> <td colspan="3">0.20</td> </tr> </table> When nominal capacitance is over 1000μF tan δ shall be added 0.02 to the listed Value with increase of every 1000μF		WV(V)	160	200	250	350	400	420	450	500	Tan δ(max)	0.12			0.15		0.20														
WV(V)	160	200	250	350	400	420	450	500																								
Tan δ(max)	0.12			0.15		0.20																										
Stability at Low Temperature (Impedance Ratio at 120Hz)	<table border="1"> <tr> <td colspan="2">Rated Voltage(V)</td> <td>160</td> <td>200</td> <td>250</td> <td>350</td> <td>400</td> <td>420</td> <td>450</td> <td>500</td> </tr> <tr> <td>Impedance</td> <td>Z_{-25°C/+20°C}</td> <td colspan="3">3</td> <td colspan="3">6</td> <td colspan="2">8</td> </tr> <tr> <td>Ratio</td> <td>Z_{-40°C/+20°C}</td> <td colspan="3">4</td> <td colspan="3">-</td> <td colspan="2">-</td> </tr> </table>		Rated Voltage(V)		160	200	250	350	400	420	450	500	Impedance	Z _{-25°C/+20°C}	3			6			8		Ratio	Z _{-40°C/+20°C}	4			-			-	
Rated Voltage(V)		160	200	250	350	400	420	450	500																							
Impedance	Z _{-25°C/+20°C}	3			6			8																								
Ratio	Z _{-40°C/+20°C}	4			-			-																								

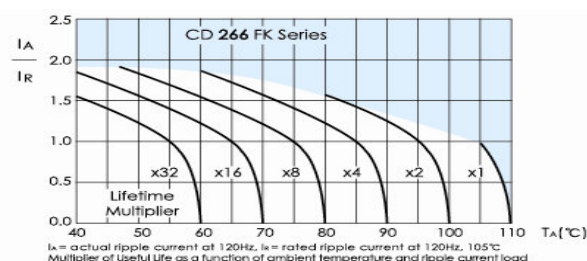
	Useful Life		Load Life	Endurance Test	Shelf Life
Lifetime	φ 10 : 8000h ≥ φ 12.5 : 10000h	90000h	φ 10 : 4000h ≥ φ 12.5 : 5000h	φ 10 : 6000h ≥ φ 12.5 : 7000h	1000h
Leakage Current	Not more than specified value		Not more than specified value	Not more than specified value	Not more than specified value
Capacitance 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 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 _R I _R 105°C	U _R 1.4x I _R 60°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

ΦD	10	12.5	16	18	20	22
F	5.0		7.5	7.5	10	10
Φd	0.6		0.8		1.0	
a	2.0				2.5	

Lifetime Diagram



Frequency Coefficient

Frequency Cap(μF)	50/60HZ	120HZ	1KHZ	10KHZ	50kHZ	100kHZ
1.0-10	0.8	1.0	1.75	2.0	2.4	2.5
22-47	0.8	1.0	1.6	1.8	1.9	2.0
56-220	0.8	1.0	1.3	1.4	1.55	1.6

Temperature Coefficient

Temperature(°C)	+70	+85	+105
Coefficient	1.80	1.40	1.00

Ratings for CD 266 FK Series

U _s (Surge Voltage) Code	Rated Capacitance	Max ESR 20°C, 120Hz	Typ ESR 20°C, 120Hz	Rated Ripple Current 105°C, 120Hz	Size ΦD×L	P/N	
(v)	(μF)	(Ω)	(Ω)	(mA _{rms})	(mm)		
160 (200) 2C	10	15.9	7	95	10×12.5	ECR2CFK100M□□100012	
	22	7.2	3.5	145	10×16	ECR2CFK220M□□100016	
	33	4.8	2.2	190	10×20	ECR2CFK330M□□100020	
	47	3.4	1.5	280	12.5×20	ECR2CFK470M□□125020	
	100	1.6	0.7	380	18×20	ECR2CFK101M□□160020	
		1.6	0.7	380	16×25.5	ECR2CFK101M□□160025	
	220	0.7	0.3	630	16×35.5	ECR2CFK221M□□160035	
200 (250) 2D	4.7	33.9	14	60	10×12.5	ECR2DFK4R7M□□100012	
	10	15.9	7	95	10×16	ECR2DFK100M□□100016	
	22	7.2	3.5	145	10×20	ECR2DFK220M□□100020	
	33	4.8	2.2	190	12.5×20	ECR2DFK330M□□125020	
	47	3.4	1.5	280	12.5×25	ECR2DFK470M□□125025	
		3.4	1.5	280	16×20	ECR2DFK470M□□160020	
	100	1.6	0.7	410	16×25.5	ECR2DFK101M□□160025	
		1.6	0.7	410	18×20	ECR2DFK101M□□180020	
	250 (300) 2E	4.7	33.9	14	60	10×12.5	ECR2EFK4R7M□□100012
		10	15.9	7	105	10×16	ECR2EFK100M□□100016
22		7.2	3.5	180	12.5×20	ECR2EFK220M□□125020	
33		4.8	2.2	250	12.5×25	ECR2EFK330M□□125025	
		4.8	2.2	250	16×20	ECR2EFK330M□□160020	
47		3.4	1.5	300	16×25.5	ECR2EFK470M□□160025	
		3.4	1.5	300	18×20	ECR2EFK470M□□180020	
100		1.6	0.7	410	16×31.5	ECR2EFK101M□□160031	
		1.6	0.7	410	18×25.5	ECR2EFK101M□□180025	
150		1.1	0.5	500	18×25.5	ECR2EFK151M□□180025	
220	0.7	0.3	700	18×36	ECR2EFK221M□□180036		
350 (400) 2V	3.3	60.3	28	50	8×11.5	ECR2VFK3R3M□□080011	
	4.7	42.3	19	65	10×16	ECR2VFK4R7M□□100016	
	10	19.9	10	120	10×20	ECR2VFK100M□□100020	
	22	9.0	4	180	12.5×20	ECR2VFK220M□□125020	
	33	6.0	2.5	210	12.5×25	ECR2VFK330M□□125025	
	47	4.2	1.8	300	16×25.5	ECR2VFK470M□□160025	
		4.2	1.8	300	18×20	ECR2VFK470M□□180020	
	100	2.0	0.8	528	18×31.5	ECR2VFK101M□□180031	
	400 (450) 2G	2.2	90.5	40	40	10×12.5	ECR2GFK2R2M□□100012
		3.3	60.3	28	50	10×16	ECR2GFK3R3M□□100016
4.7		42.3	19	70	10×20	ECR2GFK4R7M□□100020	
10		19.9	10	120	12.5×20	ECR2GFK100M□□125020	
22		9.0	4	200	12.5×25	ECR2GFK220M□□125025	
33		6.0	2.5	245	18×20	ECR2GFK330M□□180020	
		6.0	2.5	245	16×25.5	ECR2GFK330M□□160025	
47		4.2	1.8	380	18×25.5	ECR2GFK470M□□180025	
		4.2	1.8	380	16×31.5	ECR2GFK470M□□160031	
68		2.9	1.2	500	18×31.5	ECR2GFK680M□□180031	
82		2.4	1	610	18×31.5	ECR2GFK820M□□180031	
100		2.0	0.8	700	18×36	ECR2GFK101M□□180036	
120		1.7	0.6	785	18×40	ECR2GFK121M□□180040	
150		1.3	0.5	840	20×41	ECR2GFK151M□□200041	
420 (470) 2X		1	265.4	80	24	10×12.5	ECR2XFK010M□□100012
	2.2	120.6	40	40	10×16	ECR2XFK2R2M□□100016	
	3.3	80.4	24	54	10×20	ECR2XFK3R3M□□100020	
	4.7	56.5	17	65	10×20	ECR2XFK4R7M□□100020	
	10	26.5	8	118	12.5×20	ECR2XFK010M□□125020	
	15	17.7	7.1	130	12.5×20	ECR2XFK150M□□125020	
	22	12.1	3.8	175	12.5×25	ECR2XFK220M□□125025	
	33	8	3.2	232	12.5×30	ECR2XFK330M□□125030	

U _s (Surge Voltage) Code	Rated Capacitance	Max ESR 20°C, 120Hz	Typ ESR 20°C, 120Hz	Rated Ripple Current 105°C, 120Hz	Size ΦD×L	P/N	
(v)	(μF)	(Ω)	(Ω)	(mA _{rms})	(mm)		
420 (470) 2X	47	5.6	2.3	324	16×31.5	ECR2XFK470M□□160031	
	56	4.7	1.9	434	16×31.5	ECR2XFK560M□□160031	
		4.7	1.9	434	18×25.5	ECR2XFK560M□□180025	
	68	3.9	1.6	529	18×31.5	ECR2XFK680M□□180031	
		3.9	1.6	529	16×36	ECR2XFK680M□□160036	
	82	3.2	1.3	645	18×31.5	ECR2XFK820M□□180031	
		3.2	1.3	645	16×40	ECR2XFK820M□□160040	
	100	2.7	1.1	760	18×36	ECR2XFK101M□□180036	
		2.7	1.1	760	16×45	ECR2XFK101M□□160045	
	120	2.2	0.9	830	18×40	ECR2XFK121M□□180040	
		2.2	0.9	830	16×50	ECR2XFK121M□□160050	
	150	1.8	0.7	880	20×41	ECR2XFK151M□□200041	
		1.8	0.7	880	16×60	ECR2XFK151M□□160060	
	450 (500) 2W	1	265.4	80	30	10×12.5	ECR2WFK010M□□100012
		2.2	120.6	40	45	10×16	ECR2WFK2R2M□□100016
3.3		80.4	24	65	10×20	ECR2WFK3R3M□□100020	
4.7		56.5	17	80	12.5×20	ECR2WFK4R7M□□125020	
10		26.5	8	140	12.5×25	ECR2WFK100M□□125025	
22		12.1	3.5	220	16×25.5	ECR2WFK220M□□160025	
33		8.0	2.5	280	16×31.5	ECR2WFK330M□□160031	
47		5.6	2	420	16×31.5	ECR2WFK470M□□160031	
56		4.7	1.7	520	16×31.5	ECR2WFK560M□□160031	
		4.7	1.7	470	18×25.5	ECR2WFK560M□□180025	
68		3.9	1.4	610	16×36	ECR2WFK680M□□160036	
		3.9	1.4	610	18×31.5	ECR2WFK680M□□180031	
82		3.2	1.1	680	18×31.5	ECR2WFK820M□□180031	
		3.2	1.1	680	16×40	ECR2WFK820M□□160040	
100		2.7	0.9	800	18×36	ECR2WFK101M□□180036	
	2.7	0.9	800	16×45	ECR2WFK101M□□160045		
120	2.2	0.8	875	18×40	ECR2WFK121M□□180040		
	2.2	0.8	875	16×50	ECR2WFK121M□□160050		
150	1.8	0.6	935	20×41	ECR2WFK151M□□200041		
	1.8	0.6	935	16×60	ECR2WFK151M□□160060		
180	1.5	0.5	1100	22×45	ECR2WFK181M□□220045		
500 (550) 2H	1	265.4	106	32	10×12.5	ECR2HFK010M□□100012	
	2.2	120.6	48	49	10×16	ECR2HFK2R2M□□100016	
	3.3	80.4	32	68	10×20	ECR2HFK3R3M□□100020	
	4.7	56.5	22.6	84	12.5×20	ECR2HFK4R7M□□125020	
	10	26.5	10.6	145	12.5×25	ECR2HFK100M□□125025	
	22	12.1	4.8	230	16×25.5	ECR2HFK220M□□160025	
	33	8.0	3.2	295	16×31.5	ECR2HFK330M□□160031	
	47	5.6	2.3	415	18×31.5	ECR2HFK470M□□180031	
		5.6	2.3	415	16×36	ECR2HFK470M□□160036	
	56	4.7	1.9	470	18×31.5	ECR2HFK560M□□180031	
		4.7	1.9	470	16×40	ECR2HFK560M□□160040	
	68	3.9	1.6	620	16×45	ECR2HFK680M□□160045	
		3.9	1.6	620	18×36	ECR2HFK680M□□180036	
	82	3.2	1.3	680	18×40	ECR2HFK820M□□180040	
		3.2	1.3	680	16×55	ECR2HFK820M□□160055	
100	2.7	1.1	860	18×46	ECR2HFK101M□□180046		
	2.7	1.1	860	20×41	ECR2HFK101M□□200041		
120	2.2	0.9	900	16×60	ECR2HFK101M□□160060		
	2.2	0.9	900	22×45	ECR2HFK121M□□220045		
150	1.8	0.7	980	22×45	ECR2HFK151M□□220045		

Typical Curves

