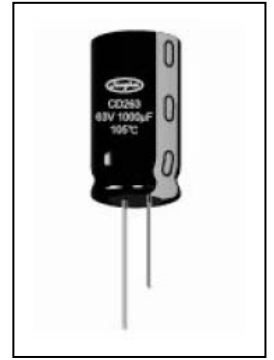
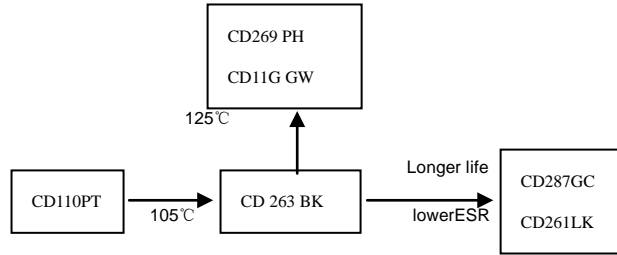




CD 263 BK Series

2000h at 105°C

Standard 105°C



Items	Characteristics	
	Operating Temperature Range(°C)	-40~+105
Voltage Range(V)	6.3-250	315-500
Capacitance Range(μF)	0.1-15000	
Capacitance Tolerance(20°C,120Hz)	±20%	
Leakage Current(μA)	6.3-100V	160-500V
	After 2 minutes at 20°C application of rated voltage,leakage current is not more than 0.01CV or 3,whichever is greater.	After 1minute at 20°C application of rated voltage,leakage current is not more than : CV≤1000:0.1 CV +40 CV>1000:0.04 CV +100
C: Nominal Capacitance (μF) V: Rated Voltage(V)		
Dissipation Factor (20°C, 120Hz)	Rated Voltage(V)	6.3 10 16 25 35 50 63 100 160 200 250 315 350 400 420 450 500
	Tan δ (max)	0.22 0.19 0.16 0.14 0.12 0.10 0.09 0.08 0.15 0.20
Stability at low temperature(Impedance Ratio at 120Hz)	Rated Voltage(V)	6.3 10 16 25 35 50 63 100 160 200 250 315 350 400 420 450 500
	Z-25°C/Z+20°C	4 3 2 3 6
	Z-40°C/Z+20°C	8 6 4 3 8 6 10

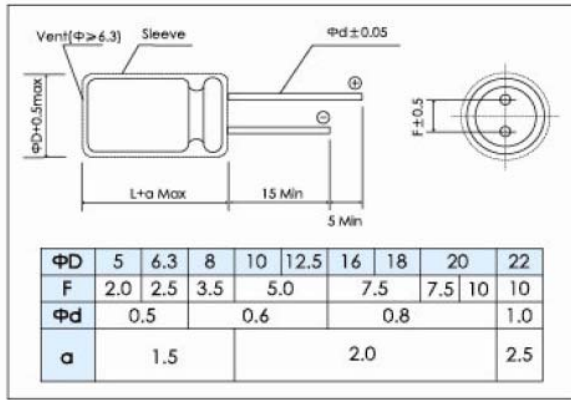
	Useful Life		Load Life	Endurance Test	Shelf Life
Lifetime	$\phi \leq 8$:2000h $\phi \geq 10$:3000h	>100000h	$\phi \leq 8$:1000h $\phi \geq 10$:2000h	2000h	1000h
Leakage Current	Not more than specified value		Not more than specified value	Not more than specified value	Not more than specified value
Capacitance 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 150% 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	After test: $U_R=0$ $I_R=0$ 105°C U_R to be applied for 30min>24h before measurement



CD 263 BK Series

Dimensions

mm



Frequency coefficient

Rated Voltage(V)	Frequency	50/60Hz	120Hz	1kHz	10kHz	50kHz	100kHz
	Cap(μF)						
6.3~100	0.1~4.7	0.32	0.4	0.7	0.8	0.92	1.0
	10~47	0.40	0.5	0.8	0.9	0.96	1.0
	100~220	0.56	0.7	0.9	0.9	0.96	1.0
	330~1000	0.64	0.8	0.9	1.0	1.0	1.0
	2200~15000	0.72	0.9	1.0	1.0	1.0	1.0
160~500	0.47~10	0.80	1.0	1.75	2.0	2.4	2.5
	22~56	0.80	1.0	1.6	1.8	1.9	2.0
	68~220	0.80	1.0	1.3	1.4	1.6	1.65

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Temperature Coefficient

Rated Voltage (V)	Temperature (°C)		
	+70	+85	+105
6.3~100	2.0	1.7	1.0
160~500	1.8	1.4	1.0

Ratings for CD263 BK Series

U _r (Surge Voltage) Code	Rated Capacitance	Max ESR 20°C, 120Hz	Max Imp 20°C, 100kHz	Rated Ripple Current 105°C, 100kHz	Size ΦDxL	P/N
(V)	(μF)	(Ω)	(Ω)	(mA Arms)	(mm)	
6.3 (7.2) 0J	33	8.8	2.5	105	5*11.5	ECR0JBK330M□□050011
	47	6.2	1.5	120	5*11.5	ECR0JBK470M□□050011
	100	2.9	1.2	130	5*11.5	ECR0JBK101M□□050011
	220	1.3	0.87	180	6.3*11.5	ECR0JBK221M□□063011
	330	0.9	0.58	220	6.3*11.5	ECR0JBK331M□□063011
	470	0.6	0.39	315	8*11.5	ECR0JBK471M□□080011
	1000	0.29	0.23	500	10*12.5	ECR0JBK102M□□100012
	2200	0.14	0.095	765	10*20	ECR0JBK222M□□100020
	3300	0.105	0.09	1050	12.5*20	ECR0JBK332M□□125020
	4700	0.079	0.061	1670	16*25	ECR0JBK472M□□160025
	6800	0.062	0.056	1740	16*25	ECR0JBK682M□□160025
	10000	0.053	0.045	2110	16*31.5	ECR0JBK103M□□160031
	15000	0.044	0.036	2580	18*35.5	ECR0JBK153M□□180035
10 (13) 1A	22	11.5	2.5	92	5*11.5	ECR1ABK220M□□050011
	33	7.6	1.9	105	5*11.5	ECR1ABK330M□□050011
	47	5.4	1.5	120	5*11.5	ECR1ABK470M□□050011
	100	2.5	1.2	130	5*11.5	ECR1ABK101M□□050011
	220	1.1	0.58	220	6.3*11.5	ECR1ABK221M□□063011
	330	0.76	0.47	265	8*11.5	ECR1ABK331M□□080011
	470	0.54	0.39	315	8*11.5	ECR1ABK471M□□080011
	1000	0.25	0.18	615	10*16	ECR1ABK102M□□100016
	2200	0.13	0.09	1050	12.5*20	ECR1ABK222M□□125020
	3300	0.09	0.068	1300	12.5*25	ECR1ABK332M□□125025
	4700	0.07	0.056	1740	16*25	ECR1ABK472M□□160025
	6800	0.06	0.045	2110	16*31.5	ECR1ABK682M□□160031
	10000	0.05	0.036	2580	18*35.5	ECR1ABK103M□□180035
16 (20) 1C	10	21.2	2.5	92	5*11.5	ECR1CBK100M□□050011
	22	9.7	1.9	105	5*11.5	ECR1CBK220M□□050011
	33	6.4	1.5	120	5*11.5	ECR1CBK330M□□050011
	47	4.5	1.2	130	5*11.5	ECR1CBK470M□□050011
	100	2.1	0.58	220	6.3*11.5	ECR1CBK101M□□063011
	220	0.97	0.47	290	8*11.5	ECR1CBK221M□□080011
	330	0.64	0.39	315	8*11.5	ECR1CBK331M□□080011

	Rated Capacitance	Max ESR 20°C, 120Hz	Max Imp 20°C, 100kHz	Rated Ripple Current 105°C, 100kHz	Size ΦDxL	P/N
	(μF)	(Ω)	(Ω)	(mA Arms)	(mm)	
	4.7	33.9	2.5	92	5*11.5	ECR1VBK4R7M□□050011
	10	15.9	1.8	105	5*11.5	ECR1VBK100M□□050011
	22	7.2	1.5	120	5*11.5	ECR1VBK220M□□050011
	33	4.8	1.5	130	5*11.5	ECR1VBK330M□□050011
	47	3.4	0.58	220	6.3*11.5	ECR1VBK470M□□063011
	100	1.6	0.39	315	8*11.5	ECR1VBK101M□□080011
	220	0.72	0.23	500	10*12.5	ECR1VBK221M□□100012
	330	0.48	0.18	615	10*16	ECR1VBK331M□□100016
	470	0.34	0.12	825	10*20	ECR1VBK471M□□100020
	1000	0.16	0.068	1300	12.5*25	ECR1VBK102M□□125025
	2200	0.08	0.045	2110	16*31.5	ECR1VBK222M□□160031
	3300	0.06	0.036	2580	18*35.5	ECR1VBK332M□□180035
	63 (79) 1J	0.1	1327	18	10	5*11.5
0.22		603	13	15	5*11.5	ECR1HBK2R2M□□050011
0.33		402	10	18	5*11.5	ECR1HBK3R3M□□050011
0.47		282	7	23	5*11.5	ECR1HBK4R7M□□050011
1		133	4.9	35	5*11.5	ECR1HBK010M□□050011
2.2		60	4.2	53	5*11.5	ECR1HBK2R2M□□050011
3.3		40	3.9	65	5*11.5	ECR1HBK3R3M□□050011
4.7		28	3.6	82	5*11.5	ECR1HBK4R7M□□050011
10		13	2.7	100	5*11.5	ECR1HBK100M□□050011
22		6	1.9	125	5*11.5	ECR1HBK220M□□050011
33		4	1.1	195	6.3*11.5	ECR1HBK330M□□063011
47		2.8	0.9	245	6.3*11.5	ECR1HBK470M□□063011
100		1.3	0.5	385	8*11.5	ECR1HBK101M□□080011
220		0.60	0.27	505	10*16	ECR1HBK221M□□100016
330		0.40	0.18	675	10*20	ECR1HBK331M□□100020
470		0.28	0.12	895	12.5*20	ECR1HBK471M□□125020
1000		0.13	0.076	1495	16*25	ECR1HBK102M□□160025
2200		0.07	0.05	2190	18*35.5	ECR1HBK222M□□180035
4.7		25	5.8	74	5*11.5	ECR1JBK4R7M□□050011
10		12	3.6	95	5*11.5	ECR1JBK100M□□050011
22		5	2.1	130	6.3*11.5	ECR1JBK220M□□063011



CD 263 BK Series

25 (32) 1E	470	0.45	0.23	500	10*12.5	ECR1CBK471M□□100012	100 (125) 2A	33	4	1.7	160	6.3*11.5	ECR1JBK330M□□063011
	1000	0.21	0.12	825	10*20	ECR1CBK102M□□100020		47	2.5	1.2	305	8*11.5	ECR1JBK470M□□080011
	2200	0.11	0.068	1300	12.5*25	ECR1CBK222M□□125025		100	1.2	0.65	395	10*12.5	ECR1JBK101M□□100012
	3300	0.08	0.056	1740	16*25	ECR1CBK332M□□160025		220	0.54	0.32	505	10*20	ECR1JBK221M□□100020
	4700	0.06	0.045	2110	16*31.5	ECR1CBK472M□□160031		330	0.36	0.22	660	12.5*20	ECR1JBK331M□□125020
	6800	0.05	0.036	2580	18*35.5	ECR1CBK682M□□180035		470	0.25	0.16	850	12.5*25	ECR1JBK471M□□125025
	4.7	39.5	3	85	5*11.5	ECR1EBK47R7M□□050011		1000	0.12	0.098	1430	16*31.5	ECR1JBK102M□□160031
	10	18.6	2.5	92	5*11.5	ECR1EBK100M□□050011		0.47	226	13	30	5*11.5	ECR2ABK47M□□050011
	22	8.4	1.9	105	5*11.5	ECR1EBK220M□□050011		1	106	11	45	5*11.5	ECR2ABK010M□□050011
	33	5.6	1.5	120	5*11.5	ECR1EBK330M□□050011		2.2	48	9.2	60	5*11.5	ECR2ABK2R2M□□050011
	47	4.0	1.2	130	5*11.5	ECR1EBK470M□□050011		3.3	32	7.2	67	5*11.5	ECR2ABK3R3M□□050011
	100	1.9	0.58	220	6.3*11.5	ECR1EBK101M□□063011		4.7	23	6.3	75	5*11.5	ECR2ABK4R7M□□050011
	220	0.84	0.39	315	8*11.5	ECR1EBK221M□□080011		10	11	3.3	110	6.3*11.5	ECR2ABK100M□□063011
	330	0.56	0.23	500	10*12.5	ECR1EBK331M□□100025		22	5	1.4	165	8*11.5	ECR2ABK220M□□080011
470	0.40	0.18	615	10*16	ECR1EBK471M□□100016	33	3.2	0.94	305	10*12.5	ECR2ABK330M□□100012		
1000	0.19	0.09	1050	12.5*20	ECR1EBK102M□□125020	47	2.3	0.68	320	10*16	ECR2ABK470M□□100016		
2200	0.10	0.056	1740	16*25	ECR1EBK222M□□160025	100	1.1	0.28	585	12.5*20	ECR2ABK101M□□125020		
3300	0.07	0.045	2110	16*31.5	ECR1EBK332M□□160031	220	0.48	0.16	1120	16*25	ECR2ABK221M□□160025		
4700	0.06	0.036	2580	18*35.5	ECR1EBK472M□□180035	330	0.32	0.13	1290	16*25	ECR2ABK331M□□160025		
						470	0.23	0.11	1350	16*31.5	ECR2ABK471M□□160031		

Ratings for CD263 BK Series

U _k (Surge Voltage) Code	Rated Capacitance	Max ESR 20°C, 120Hz	Rated Ripple Current 105°C, 120Hz	Size ΦDxL	P/N
(v)	(μF)	(Ω)	(mArms)	(mm)	
160 (200) 2C	0.47	423.5	12	6.3*11.5	ECR2CBK47M□□063011
	1	199.0	18	6.3*11.5	ECR2CBK010M□□063011
	2.2	90.5	26	6.3*11.5	ECR2CBK2R2M□□063011
	3.3	60.3	37	8*11.5	ECR2CBK3R3M□□080011
	4.7	42.3	44	8*11.5	ECR2CBK4R7M□□080011
	10	19.9	75	10*12.5	ECR2CBK100M□□100012
	22	9.0	135	10*16	ECR2CBK220M□□100016
	33	6.0	175	10*20	ECR2CBK330M□□100020
	47	4.2	230	12.5*20	ECR2CBK470M□□125020
	100	2.0	330	16*25.5	ECR2CBK101M□□160025
	220	0.9	500	16*35.5	ECR2CBK221M□□160035
	200 (250) 2D	0.47	423.5	12	6.3*11.5
1		199.0	18	6.3*11.5	ECR2DBK010M□□063011
2.2		90.5	26	6.3*11.5	ECR2DBK2R2M□□063011
3.3		60.3	37	8*11.5	ECR2DBK3R3M□□080011
4.7		42.3	50	10*12.5	ECR2DBK4R7M□□100012
10		19.9	80	10*16	ECR2DBK100M□□100016
22		9.0	135	10*20	ECR2DBK220M□□100020
33		6.0	190	12.5*20	ECR2DBK330M□□125020
47		4.2	230	12.5*25	ECR2DBK470M□□125025
100		2.0	360	16*25.5	ECR2DBK101M□□160025
220		0.9	525	18*31.5	ECR2DBK221M□□180031
250 (300) 2E		0.47	423.5	12	6.3*11.5
	1	199.0	18	6.3*11.5	ECR2EBK010M□□063011
	2.2	90.5	30	8*11.5	ECR2EBK2R2M□□080011
	3.3	60.3	43	8*11.5	ECR2EBK3R3M□□080011
	4.7	42.3	50	10*12.5	ECR2EBK4R7M□□100012
	10	19.9	90	10*16	ECR2EBK100M□□100016
	22	9.0	155	12.5*20	ECR2EBK220M□□125020
	33	6.0	190	12.5*25	ECR2EBK330M□□125025
	47	4.2	225	16*25.5	ECR2EBK470M□□160025
	100	2.0	340	16*31.5	ECR2EBK101M□□160031
	150	1.3	405	18*25.5	ECR2EBK151M□□180025
	220	0.9	570	18*36	ECR2EBK221M□□180036

U _k (Surge Voltage) Code	Rated Capacitance	Max ESR 20°C, 120Hz	Rated Ripple Current 105°C, 120Hz	Size ΦDxL	P/N	
(v)	(μF)	(Ω)	(mArms)	(mm)		
420 (470) 2X	1	265.4	19	10*12.5	ECR2XBK010M□□100012	
	2.2	120.6	29	10*12.5	ECR2XBK2R2M□□100012	
	3.3	80.4	38	10*16	ECR2XBK3R3M□□100016	
	4.7	56.5	52	10*20	ECR2XBK4R7M□□100020	
	10	26.5	116	12.5*20	ECR2XBK100M□□125020	
	22	12.1	162	12.5*25	ECR2XBK220M□□125025	
	33	8.0	228	16*25.5	ECR2XBK330M□□160025	
	47	5.6	380	16*31.5	ECR2XBK470M□□160031	
	56	4.7	420	16*31.5	ECR2XBK560M□□160031	
		4.7	420	18*25.5	ECR2XBK560M□□180025	
	68	3.9	542	18*31.5	ECR2XBK680M□□180031	
		3.9	542	16*36	ECR2XBK680M□□160036	
	82	3.2	608	18*31.5	ECR2XBK820M□□180031	
		3.2	608	16*40	ECR2XBK820M□□160040	
	100	2.7	713	18*36	ECR2XBK101M□□180036	
		2.7	7136	16*45	ECR2XBK101M□□160045	
	120	2.2	779	18*40	ECR2XBK121M□□180040	
		2.2	779	16*50	ECR2XBK121M□□160050	
	150	1.8	874	20*41	ECR2XBK151M□□200041	
		1.8	874	16*60	ECR2XBK151M□□160060	
	450 (500) 2W	1	265.4	19	10*12.5	ECR2WBK010M□□100012
		2.2	120.6	29	10*16	ECR2WBK2R2M□□100016
		3.3	80.4	42	10*20	ECR2WBK3R3M□□100020
		4.7	56.5	54	10*20	ECR2WBK4R7M□□100020
10		26.5	122	10*20	ECR2WBK100M□□100020	
		26.5	122	12.5*20	ECR2WBK100M□□125020	
22		12.1	170	12.5*25	ECR2WBK220M□□125025	
33		8.0	240	16*25.5	ECR2WBK330M□□160025	
47		5.6	400	16*31.5	ECR2WBK470M□□160031	
56		4.7	440	18*25.5	ECR2WBK560M□□180025	
		4.7	440	16*31.5	ECR2WBK560M□□160031	
68		3.9	570	18*31.5	ECR2WBK680M□□180031	
		3.9	570	16*36	ECR2WBK680M□□160036	
82		3.2	640	18*31.5	ECR2WBK820M□□180031	



CD 263 BK Series

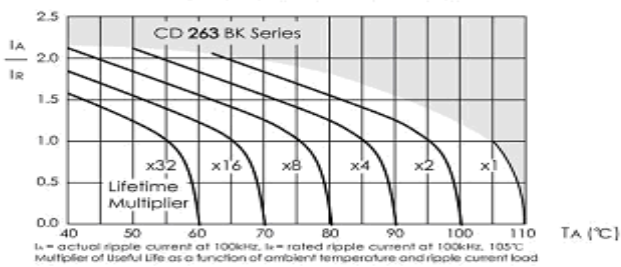
315 (350) 2F	0.47	564.6	11	6.3*11.5	ECR2FBKR47M□□063011
	1	265.4	18	8*11.5	ECR2FBK010M□□080011
	2.2	120.6	30	10*12.5	ECR2FBK2R2M□□100012
	3.3	80.4	36	10*12.5	ECR2FBK3R3M□□100012
	4.7	56.5	47	10*16	ECR2FBK4R7M□□100016
	10	26.5	95	10*20	ECR2FBK100M□□100020
	22	12.1	130	12.5*20	ECR2FBK220M□□125020
	33	8.0	180	12.5*25	ECR2FBK330M□□125025
	47	5.6	330	16*25.5	ECR2FBK470M□□160025
	100	2.7	620	18*31.5	ECR2FBK101M□□180031
350 (400) 2V	0.47	564.6	11	6.3*11.5	ECR2VBKR47M□□063011
	1	265.4	18	8*11.5	ECR2VBK010M□□080011
	2.2	120.6	30	10*12.5	ECR2VBK2R2M□□100012
	3.3	80.4	36	10*12.5	ECR2VBK3R3M□□100012
	4.7	56.5	47	10*16	ECR2VBK4R7M□□100016
	10	26.5	95	10*20	ECR2VBK100M□□100020
	22	12.1	130	12.5*20	ECR2VBK220M□□125020
	33	8.0	180	12.5*25	ECR2VBK330M□□125025
	47	5.6	330	16*25.5	ECR2VBK470M□□160025
	100	2.7	620	18*31.5	ECR2VBK101M□□180031
400 (450) 2G	1	265.4	18	8*11.5	ECR2GBK010M□□080011
	2.2	120.6	30	10*12.5	ECR2GBK2R2M□□100012
	3.3	80.4	40	10*16	ECR2GBK3R3M□□100016
	4.7	56.5	52	10*20	ECR2GBK4R7M□□100020
	10	26.5	110	12.5*20	ECR2GBK100M□□125020
	22	12.1	150	12.5*25	ECR2GBK220M□□125025
	33	8.0	215	16*25.5	ECR2GBK330M□□160025
	47	5.6	360	16*25.5	ECR2GBK470M□□160025
	68	3.9	470	18*25.5	ECR2GBK680M□□180025
	82	3.2	575	18*31.5	ECR2GBK820M□□180031
	100	2.7	675	18*36	ECR2GBK101M□□180036
	120	2.2	735	18*40	ECR2GBK121M□□180040
	150	1.8	825	20*41	ECR2GBK151M□□200041

100	3.2	640	18*36	ECR2WBK820M□□180036	
	3.2	640	16*40	ECR2WBK820M□□160040	
	2.7	750	18*36	ECR2WBK101M□□180036	
	2.7	750	16*45	ECR2WBK101M□□160045	
	120	2.2	820	18*40	ECR2WBK121M□□180040
		2.2	820	16*50	ECR2WBK121M□□160050
	150	1.8	920	18*46	ECR2WBK151M□□180046
		1.8	920	20*41	ECR2WBK151M□□200041
		1.8	920	16*60	ECR2WBK151M□□160060
	180	1.5	1100	22*41	ECR2WBK181M□□220041
500 (550) 2H	1	265.4	21	10*12.5	ECR2HBK010M□□100012
	2.2	120.6	35	10*16	ECR2HBK2R2M□□100016
	3.3	80.4	48	10*20	ECR2HBK3R3M□□100020
	4.7	56.5	63	12.5*20	ECR2HBK4R7M□□125020
	10	26.5	120	12.5*25	ECR2HBK100M□□125025
	22	12.1	180	16*25.5	ECR2HBK220M□□160025
	33	8.0	240	16*31.5	ECR2HBK330M□□160031
	47	5.6	405	18*31.5	ECR2HBK470M□□180031
	56	4.7	430	16*36	ECR2HBK560M□□160036
		4.7	450	16*40	ECR2HBK560M□□160040
		4.7	450	18*31.5	ECR2HBK560M□□180031
	68	3.9	560	18*36	ECR2HBK680M□□180036
		3.9	560	18*40	ECR2HBK680M□□180040
		3.9	560	16*45	ECR2HBK680M□□160045
	82	3.2	640	18*40	ECR2HBK820M□□180040
3.2		640	16*55	ECR2HBK820M□□160055	
100	2.7	800	20*41	ECR2HBK101M□□200041	
	2.7	800	18*46	ECR2HBK101M□□180046	
	2.7	800	16*60	ECR2HBK101M□□160060	
120	2.2	840	22*45	ECR2HBK121M□□220045	
150	1.8	890	22*45	ECR2HBK151M□□220045	

Customer products are available on request

Lifetime Diagram

Lifetime Diagram 6.3 ~ 100V



Lifetime Diagram 160 ~ 500V

