

3000h 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



Rated voltage Series Rated Capacitance Capacitance tolerance Terminal Code Sleeve Color

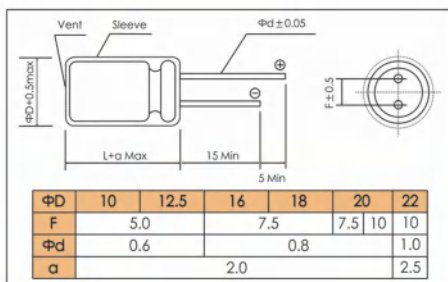
Items	Characteristics	
Operating Temperature Range (°C)	-40 ~ +105	-25 ~ +105
Voltage Range (V)	160 ~ 250	350 ~ 500
Capacitance Range (µF)	1 ~ 220	
Capacitance Tolerance (20°C, 120Hz)	± 20%	
Leakage Current (µA)	After 1 minute at 20°C application of rated voltage, leakage current is not more than: $CV \leq 1000 : I \leq 0.06CV + 40$ $CV > 1000 : I \leq 0.03CV + 70$ C: Nominal Capacitance (µF) V: Rated Voltage (V)	
Dissipation Factor (20°C, 120Hz)	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)	Rated Voltage (V)	160 200 250 350 400 420 450 500
	Impedance Ratio	$Z_{-25°C} / Z_{+20°C}$ 3 6 8 $Z_{-40°C} / Z_{+20°C}$ 4 -

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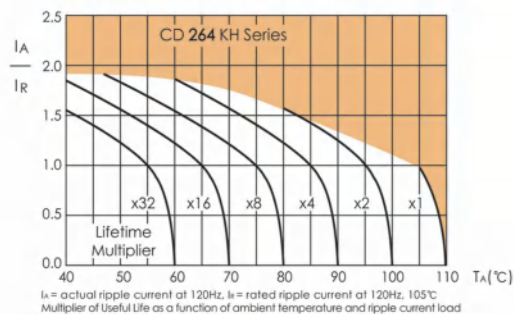
	Useful Life	Load Life	Endurance Test	Shelf Life
Lifetime	6000h >70000h	3000h	4000h	1000h
Leakage Current	Not more than specified value	Not more than specified value	Not more than specified value	Not more than specified value
Capacitance Change	Within ± 30% of initial value	Within ± 20% of initial value	Within ± 20% of initial value	Within ± 20% of initial value
Dissipation Factor	Not more than 300% of specified value	Not more than 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 $1.4 \times I_R$ 60°C	U_R I_R 105°C	$U_R = 0$ $I_R = 0$ 105°C After test: U_R to be applied for 30min >24h before measurement

Dimensions

mm



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

FCD CD264

Ratings for CD 264 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 x L
(V)	(μF)	(Ω)	(Ω)	(mAmps)	(mm)
160 (200) 2C	10	15.9	5.3	95	10×12.5
	22	7.2	2.4	145	10×16
	33	4.8	1.6	190	10×20
	47	3.4	1.1	280	12.5×20
	100	1.6	0.5	380	18×20
	220	0.7	0.2	630	16×25.5
200 (250) 2D	4.7	33.9	11.2	60	10×12.5
	10	15.9	5.3	95	10×16
	22	7.2	2.4	145	10×20
	33	4.8	1.6	190	12.5×20
	47	3.4	1.1	280	12.5×25
	100	1.6	0.5	410	16×20
250 (300) 2E	100	1.6	0.5	410	16×25.5
	4.7	33.9	11.2	60	10×12.5
	10	15.9	5.3	105	10×16
	22	7.2	2.4	180	12.5×20
	33	4.8	1.6	250	12.5×25
	47	3.4	1.1	300	16×20
350 (400) 2V	47	3.4	1.1	300	18×20
	100	1.6	0.5	410	16×31.5
	3.3	60.3	19.9	50	8×11.5
	4.7	42.3	14	65	10×16
	10	19.9	6.6	120	10×20
	22	9	3	180	12.5×20
400 (450) 2G	33	6	2	210	12.5×25
	47	4.2	1.4	350	16×25.5
	100	2	0.7	650	18×20
	2.2	90.5	29.9	40	10×12.5
	3.3	60.3	19.9	50	10×16
	4.7	42.3	14	70	10×20
420 (470) 2X	10	19.9	6.3	120	12.5×20
	22	9	3	200	12.5×25
	33	6	2	245	18×20
	47	4.2	1.4	380	18×25.5
	68	2.9	1	500	18×31.5
	100	2.4	0.8	610	18×31.5
450 (500) 2W	82	2.4	0.8	560	20×25.5
	100	2	0.7	700	18×36
	120	1.7	0.6	785	18×40
	150	1.3	0.4	840	20×41
	1	265.4	87.6	23	10×12.5
	2.2	120.6	40	38	10×16
500 (550) 2H	3.3	80.4	26.5	45	10×20
	4.7	56.5	18.6	60	10×20
	10	26.5	8.8	118	12.5×20
	22	12.1	4	170	12.5×25
	33	8	2.7	230	16×25.5
	47	5.6	2.3	350	16×31.5
500 (550) 2H	56	4.7	1.9	425	16×31.5
	68	3.9	1.6	510	18×31.5
	82	3.2	1.3	625	18×31.5
	100	2.7	1.1	720	18×36
	120	2.2	0.9	800	16×45
	150	1.8	0.7	850	20×41
500 (550) 2H	1	265.4	87.6	30	10×12.5
	2.2	120.6	39.8	45	10×16
	3.3	80.4	26.5	65	10×20
	4.7	56.5	18.6	80	12.5×20
	10	26.5	8.8	140	12.5×25
	22	12.1	4	220	16×25.5
500 (550) 2H	33	8	2.7	280	16×31.5
	47	5.6	1.9	420	16×31.5
	56	4.7	1.7	450	16×31.5
	68	3.9	1.3	590	18×31.5
	82	3.2	1.1	650	16×36

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 x L
(V)	(μF)	(Ω)	(Ω)	(mAmps)	(mm)
450 (500) 2W	82	3.2	1.1	650	18×36
		3.2	1.1	650	16×40
		3.2	1.1	580	20×30
	100	2.7	0.9	760	18×36
		2.7	0.9	760	16×45
		2.7	0.9	680	20×30
120	2.2	0.7	830	18×40	
	2.2	0.7	830	16×50	
	1.8	0.6	920	20×41	
150	1.8	0.6	920	18×46	
	1.8	0.6	920	16×60	
	1.5	0.5	1100	22×41	
180	1.5	0.5	1100	22×45	
220	1.2	0.4	1200	22×45	
500 (550) 2H	1	265.4	106.2	32	10×12.5
	2.2	120.6	48.3	49	10×16
	3.3	80.4	32.2	68	10×20
	4.7	56.5	22.6	84	12.5×20
	10	26.5	10.6	145	12.5×25
	22	12.1	4.8	230	16×25.5
	33	8	3.2	295	16×31.5
	47	5.6	2.3	415	18×31.5
	56	5.6	2.3	415	16×36
	68	4.7	1.9	460	18×31.5
	82	4.7	1.9	460	16×40
	100	3.9	1.6	580	18×36
	120	3.9	1.6	580	18×40
	150	3.9	1.6	580	16×45
	500 (550) 2H	82	3.2	1.3	650
3.2			1.3	650	16×55
100		2.7	1.1	820	20×41
		2.7	1.1	820	18×46
120		2.2	0.9	860	16×60
		2.2	0.9	860	22×45

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Typical Curves

