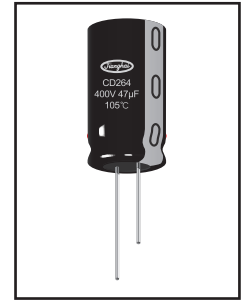
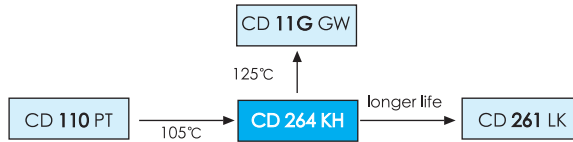


# CD 264 KH SERIES



3000h at 105°C

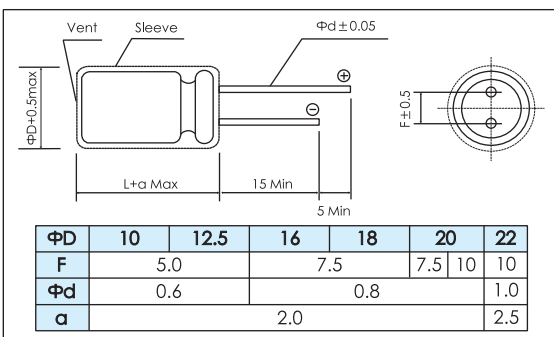
- High rated voltage, up to 500V
- High-reliability and professional applications
- Lighting, monitors, general industrial
- Filtering of high voltages in power supplies



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 -

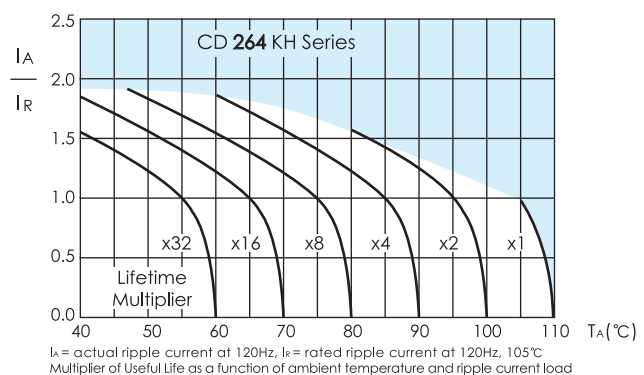
	Useful Life		Load Life	Endurance Test	Shelf Life
Lifetime	6000h	>70000h	3000h	4000h	1000h
Leakage Current	Not more than specified value		Not more than specified value	Not more than specified value	Not more than specified value
Capacitance Change	Within ± 30% of initial value		Within ± 20% of initial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

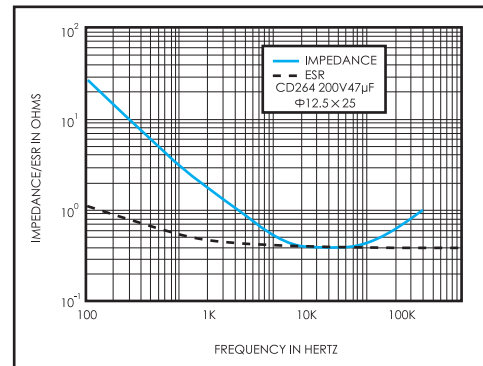
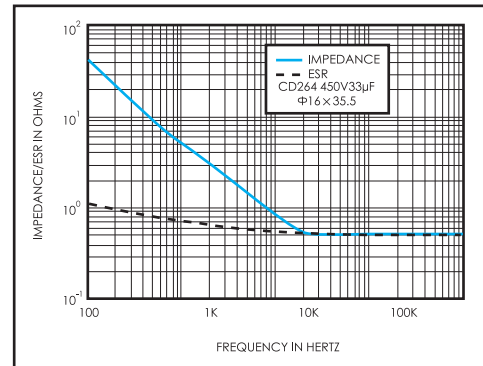
## Ratings for CD 264 KH Series

U <sub>s</sub> (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	P/N
(V)	(μF)	(Ω)	(Ω)	(mArms)	(mm)	-
160 (200) 2C	10	15.9	5.3	95	10 x 12.5	ECR2CKH100M□□100012
	22	7.2	2.4	145	10 x 16	ECR2CKH220M□□100016
	33	4.8	1.6	190	10 x 20	ECR2CKH330M□□100020
	47	3.4	1.1	280	12.5 x 20	ECR2CKH470M□□125020
	100	1.6	0.5	380	18 x 20	ECR2CKH101M□□180020
	220	0.7	0.2	380	16 x 25.5	ECR2CKH101M□□160025
200 (250) 2D	4.7	33.9	11.2	60	10 x 12.5	ECR2DKH4R7M□□100012
	10	15.9	5.3	95	10 x 16	ECR2DKH100M□□100016
	22	7.2	2.4	145	10 x 20	ECR2DKH220M□□100020
	33	4.8	1.6	190	12.5 x 20	ECR2DKH330M□□125020
	47	3.4	1.1	280	12.5 x 25	ECR2DKH470M□□125025
	100	1.6	0.5	410	16 x 20	ECR2DKH470M□□160020
250 (300) 2E	4.7	33.9	11.2	60	10 x 12.5	ECR2DKH101M□□160025
	10	15.9	5.3	105	10 x 16	ECR2DKH101M□□180020
	22	7.2	2.4	180	12.5 x 20	ECR2DKH101M□□180020
	33	4.8	1.6	250	12.5 x 25	ECR2EKH4R7M□□100012
	47	3.4	1.1	300	16 x 20	ECR2EKH470M□□160025
	100	1.6	0.5	410	18 x 20	ECR2EKH470M□□180020
350 (400) 2V	4.7	33.9	11.2	60	10 x 12.5	ECR2EKH101M□□160025
	10	15.9	5.3	105	10 x 16	ECR2EKH101M□□180020
	22	7.2	2.4	180	12.5 x 20	ECR2EKH101M□□180025
	33	4.8	1.6	250	12.5 x 25	ECR2EKH101M□□180025
	47	3.4	1.1	300	16 x 25.5	ECR2EKH101M□□180025
	100	1.6	0.5	410	18 x 25.5	ECR2EKH101M□□180025
400 (450) 2G	3.3	60.3	19.9	50	8 x 11.5	ECR2VKH3R3M□□080011
	4.7	42.3	14	65	10 x 16	ECR2VKH4R7M□□100016
	10	19.9	6.6	120	10 x 20	ECR2VKH100M□□100020
	22	9	3	180	12.5 x 20	ECR2VKH220M□□125020
	33	6	2	210	12.5 x 25	ECR2VKH330M□□125025
	47	4.2	1.4	350	16 x 25.5	ECR2VKH470M□□160025
420 (470) 2X	4.2	1.4	350	18 x 20	ECR2VKH470M□□180020	
	100	2	0.7	650	18 x 31.5	ECR2VKH101M□□180031
	2.2	90.5	29.9	40	10 x 12.5	ECR2GKH2R2M□□100012
	3.3	60.3	19.9	43	10 x 12.5	ECR2GKH3R3M□□100012
	4.7	42.3	14	64	10 x 16	ECR2GKH3R3M□□100016
	10	19.9	6.3	100	10 x 20	ECR2GKH4R7M□□100016
450 (500) 2W	22	9	3	200	12.5 x 25	ECR2GKH4R7M□□100020
	33	6	2	245	18 x 20	ECR2GKH100M□□100020
	47	4.2	1.4	380	16 x 31.5	ECR2GKH100M□□100020
	68	2.9	1	500	18 x 25.5	ECR2GKH100M□□125020
	82	2.4	0.8	610	18 x 31.5	ECR2GKH220M□□125025
	100	2	0.7	700	18 x 36	ECR2GKH330M□□130033
450 (500) 2W	120	1.7	0.6	785	18 x 40	ECR2GKH470M□□160025
	150	1.3	0.4	840	20 x 41	ECR2GKH470M□□160031
	1	265.4	87.6	23	10 x 12.5	ECR2GKH101M□□180031
	2.2	120.6	39.8	36	10 x 12.5	ECR2GKH101M□□180031
	3.3	80.4	26.5	50	10 x 16	ECR2GKH101M□□180031
	4.7	56.5	18.6	65	10 x 20	ECR2GKH101M□□180031

U <sub>s</sub> (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	P/N
(V)	(μF)	(Ω)	(Ω)	(mArms)	(mm)	-
450 (500) 2W	10	26.5	8.8	110	12.5 x 20	ECR2WKH100M□□125020
		26.5	8.8	140	12.5 x 25	ECR2WKH100M□□125025
	22	12.1	4	175	12.5 x 25	ECR2WKH220M□□125025
		12.1	4	220	16 x 25.5	ECR2WKH220M□□160025
	33	8	2.7	245	16 x 25.5	ECR2WKH330M□□160025
		8	2.7	280	16 x 31.5	ECR2WKH330M□□160031
	47	5.6	1.9	420	16 x 31.5	ECR2WKH470M□□160031
		4.7	1.7	450	16 x 31.5	ECR2WKH560M□□160031
	56	4.7	1.7	450	18 x 31.5	ECR2WKH560M□□180031
		3.9	1.3	590	18 x 31.5	ECR2WKH680M□□180031
	68	3.9	1.3	590	16 x 36	ECR2WKH680M□□160036
		3.2	1.1	650	18 x 31.5	ECR2WKH820M□□180031
82	3.2	1.1	650	18 x 36	ECR2WKH820M□□180036	
	3.2	1.1	650	16 x 40	ECR2WKH820M□□160040	
100	2.7	0.9	760	18 x 36	ECR2WKH101M□□180036	
	2.7	0.9	760	16 x 45	ECR2WKH101M□□160045	
120	2.2	0.7	830	18 x 40	ECR2WKH121M□□180040	
	2.2	0.7	830	16 x 50	ECR2WKH121M□□160050	
150	1.8	0.6	920	20 x 41	ECR2WKH151M□□200041	
	1.8	0.6	920	18 x 46	ECR2WKH151M□□180046	
180	1.8	0.6	920	16 x 60	ECR2WKH151M□□160060	
	1.5	0.5	1100	22 x 41	ECR2WKH181M□□220041	
500 (550) 2H	1	265.4	106.2	32	10 x 12.5	ECR2XKH101M□□100012
		2.2	120.6	48.3	49	10 x 16
	3.3	80.4	32.2	68	10 x 20	ECR2XKH3R3M□□100020
		4.7	56.5	22.6	84	12.5 x 20
	10	26.5	10.6	145	12.5 x 25	ECR2XKH100M□□125025
		22	12.1	4.8	230	16 x 25.5
	33	8	3.2	295	16 x 31.5	ECR2XKH330M□□160031
		5.6	2.3	415	18 x 31.5	ECR2XKH470M□□180031
	47	5.6	2.3	415	16 x 36	ECR2XKH470M□□160036
		4.7	1.9	460	18 x 31.5	ECR2XKH560M□□180031
	56	4.7	1.9	460	16 x 40	ECR2XKH560M□□160040
		3.9	1.6	580	18 x 36	ECR2XKH680M□□180036
68	3.9	1.6	580	18 x 40	ECR2XKH680M□□180040	
	3.9	1.6	580	16 x 45	ECR2XKH680M□□160045	
82	3.2	1.3	650	18 x 40	ECR2XKH820M□□180040	
	3.2	1.3	650	16 x 55	ECR2XKH820M□□160055	
100	2.7	1.1	820	20 x 41	ECR2XKH101M□□200041	
	2.7	1.1	820	18 x 46	ECR2XKH101M□□180046	
120	2.2	0.9	860	22 x 45	ECR2XKH101M□□220045	
	1.8	0.7	930	22 x 45	ECR2XKH151M□□220045	

Customer products are available on request.

## Typical Curves



MINIATURE