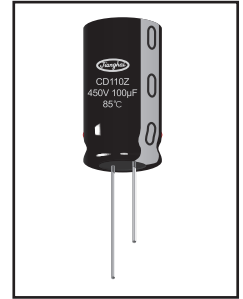


5000h at 85°C

- Flame retardant, overvoltage venting specification
- Meet IEC 60695-2-2 (B grade) standard
- Load life of 5000 hours at 85°C

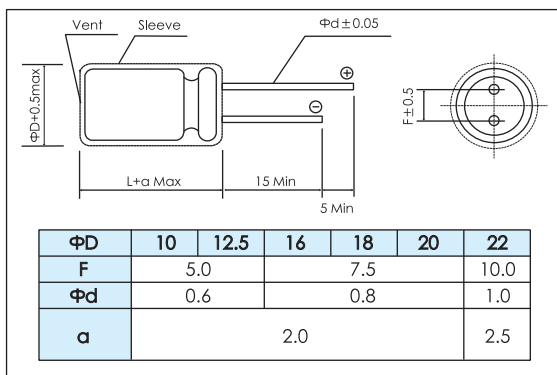


Items	Characteristics				
Operating Temperature Range (°C)	-25 ~ +85				
Voltage Range (V)	350 ~ 450				
Capacitance Range (μF)	3.3 ~ 180				
Capacitance Tolerance (20°C, 120Hz)	± 20%				
Leakage Current (μA)	After 2 minute at 20°C application of rated voltage, leakage current is not more than 0.023CV+70. C: Nominal Capacitance (μF) V: Rated Voltage (V)				
Dissipation Factor (20°C, 120Hz)	Rated Voltage (V)	350	400	420	450
	Tan δ (max)	0.20			0.24
Stability at Low Temperature (Impedance Ratio at 120Hz)	Rated Voltage (V)	350	400	420	450
	Z <sub>-25°C</sub> /Z <sub>+20°C</sub>	6			

Lifetime	Useful Life		Load Life	Endurance Test	Shelf Life
		7000h	8000h	5000h	5000h
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 ± 50% 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 <sub>R</sub> I <sub>R</sub> 85°C	U <sub>R</sub> 1.4 x I <sub>R</sub> 40°C	U <sub>R</sub> I <sub>R</sub> 85°C	U <sub>R</sub> I <sub>R</sub> = 0 85°C	U <sub>R</sub> = 0 I <sub>R</sub> = 0 85°C After test: U <sub>R</sub> to be applied for 30min >24h before measurement

## Dimensions

mm



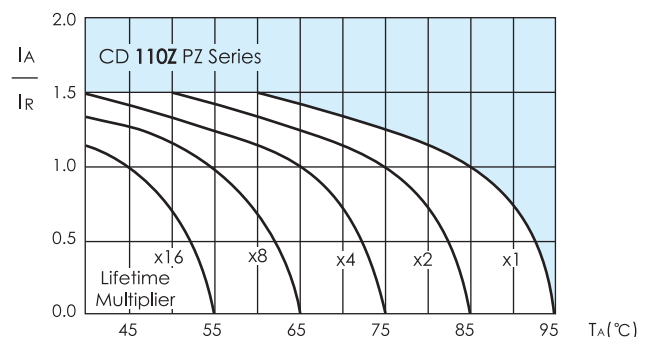
## Temperature Coefficient

Temperature(°C)	+70	+85
Coefficient	1.35	1.00

## Frequency Coefficient

Cap(μF)	Frequency(Hz)				
	50~60	120	1k	10k	100k
Coefficient	0.80	1.00	1.30	1.50	1.60

## Lifetime Diagram



I<sub>A</sub> = actual ripple current at 120Hz, I<sub>R</sub> = rated ripple current at 120Hz, 85°C  
Multiplier of Useful Life as a function of ambient temperature and ripple current load

# CD 110Z PZ SERIES



## Ratings for CD 110Z PZ Series

U <sub>k</sub> (Surge Voltage) Code	Rated Capacitance	Max ESR 20°C, 120Hz	Rated Ripple Current 85°C, 120Hz	Size ΦD x L	P/N	
(V)	(μF)	(Ω)	(mA <sub>rms</sub> )	(mm)	-	
350 (400) 2V	4.7	56.5	75	10×12.5	ECR2VPZ4R7M□□100012	
	10	26.5	130	10×20	ECR2VPZ100M□□100020	
	22	12.1	180	12.5×20	ECR2VPZ220M□□125020	
	33	8.0	250	12.5×25	ECR2VPZ330M□□125025	
	47	5.6	365	16×25.5	ECR2VPZ470M□□160025	
	68	3.9	430	18×25.5	ECR2VPZ680M□□180025	
	100	2.7	520	18×31.5	ECR2VPZ101M□□180031	
400 (450) 2G	3.3	80.4	54	10×12.5	ECR2GPZ3R3M□□100012	
		80.4	60	10×16	ECR2GPZ3R3M□□100016	
	4.7	56.5	71	10×12.5	ECR2GPZ4R7M□□100012	
		56.5	76	10×16	ECR2GPZ4R7M□□100016	
	10	26.5	118	10×16	ECR2GPZ100M□□100016	
		26.5	123	10×20	ECR2GPZ100M□□100020	
	22	26.5	148	12.5×20	ECR2GPZ100M□□125020	
		12.1	197	12.5×25	ECR2GPZ220M□□125025	
	33	8.0	242	12.5×25	ECR2GPZ330M□□125025	
		8.0	242	16×20	ECR2GPZ330M□□160020	
		8.0	277	16×25.5	ECR2GPZ330M□□160025	
	47	5.6	361	16×25.5	ECR2GPZ470M□□160025	
		3.9	423	18×25.5	ECR2GPZ680M□□180025	
	82	3.2	509	18×31.5	ECR2GPZ820M□□180031	
	100	2.7	595	18×36	ECR2GPZ101M□□180036	
	120	2.2	660	18×40	ECR2GPZ121M□□180040	
		1.8	760	16×60	ECR2GPZ151M□□160060	
	150		1.8	760	18×45	ECR2GPZ151M□□180045
		180	1.8	760	20×41	ECR2GPZ151M□□200041
	1.5		940	18×50	ECR2GPZ181M□□180050	
180		1.5	940	22×41	ECR2GPZ181M□□220041	
	420 (470) 2X	3.3	80.4	54	10×12.5	ECR2XPZ3R3M□□100012
56.5			76	10×16	ECR2XPZ4R7M□□100016	
10		26.5	123	10×20	ECR2XPZ100M□□100020	
		12.1	197	12.5×25	ECR2XPZ220M□□125025	
33		8.0	242	16×20	ECR2XPZ330M□□160020	
		5.6	361	16×31.5	ECR2XPZ470M□□160031	
68		3.9	420	18×25.5	ECR2XPZ680M□□180025	
		3.2	505	16×40	ECR2XPZ820M□□160040	
82		3.2	505	18×31.5	ECR2XPZ820M□□180031	
		2.7	590	16×45	ECR2XPZ101M□□160045	
100		2.7	590	18×36	ECR2XPZ101M□□180036	
		2.2	655	16×50	ECR2XPZ121M□□160050	
120		2.2	655	18×40	ECR2XPZ121M□□180040	
		1.8	754	16×60	ECR2XPZ151M□□160060	
150			1.8	754	20×41	ECR2XPZ151M□□200041
		1.5	935	18×50	ECR2XPZ181M□□180050	
180			1.5	935	22×41	ECR2XPZ181M□□220041
		450 (500) 2W	3.3	96.5	50	10×12.5
67.8				70	10×16	ECR2WPZ4R7M□□100016
10			31.8	110	10×20	ECR2WPZ100M□□100020
	14.5		180	12.5×25	ECR2WPZ220M□□125025	
33	9.7		230	16×25.5	ECR2WPZ330M□□160025	
	6.8		330	16×31.5	ECR2WPZ470M□□160031	
68	4.7		400	18×25.5	ECR2WPZ680M□□180025	
	82		3.9	480	18×31.5	ECR2WPZ820M□□180031
3.9			480	18×36	ECR2WPZ820M□□180036	
3.9			480	16×40	ECR2WPZ820M□□160040	
100	3.2		560	18×36	ECR2WPZ101M□□160036	
	3.2		560	16×45	ECR2WPZ101M□□160045	
120	2.7		625	18×40	ECR2WPZ121M□□180040	
	2.7		625	16×50	ECR2WPZ121M□□160050	
150	2.1		720	16×60	ECR2WPZ151M□□160060	
	2.1		720	18×45	ECR2WPZ151M□□180045	
	2.1		720	20×41	ECR2WPZ151M□□200041	
180	1.8		900	18×50	ECR2WPZ181M□□180050	
	1.8		900	22×41	ECR2WPZ181M□□220041	

Customer products are available on request.