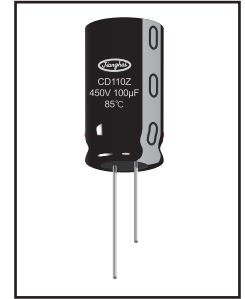


# CD 110Z PZ SERIES



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

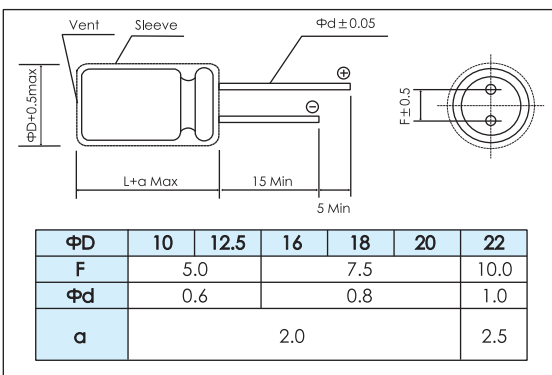


Items	Characteristics				
Operating Temperature Range (°C)	-25 ~ +85				
Voltage Range (V)	350 ~ 450				
Capacitance Range (μF)	3.3 ~ 180				
Capacitance Tolerance (20°C, 120Hz)	± 20%				
Leakage Current (μA)	After 2 minute at 20°C application of rated voltage, leakage current is not more than 0.023CV+70. 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			

	Useful Life		Load Life	Endurance Test	Shelf Life
Lifetime	7000h	8000h	5000h	5000h	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 ± 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



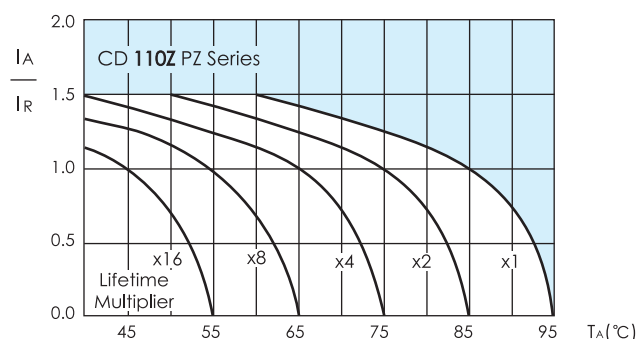
## Frequency Coefficient

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

## Temperature Coefficient

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

## Lifetime Diagram



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

## 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
	47	8.0	277	16×25.5	ECR2GPZ330M□□160025
		5.6	361	16×25.5	ECR2GPZ470M□□160025
	68	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
	150	1.8	760	16×60	ECR2GPZ151M□□160060
		1.8	760	18×46	ECR2GPZ151M□□180045
180	1.8	760	20×41	ECR2GPZ151M□□200041	
	1.5	940	18×50	ECR2GPZ181M□□180050	
	1.5	940	22×41	ECR2GPZ181M□□220041	
420 (470) 2X	3.3	80.4	54	10×12.5	ECR2XPZ3R3M□□100012
	4.7	56.5	76	10×16	ECR2XPZ4R7M□□100016
	10	26.5	123	10×20	ECR2XPZ100M□□100020
	22	12.1	197	12.5×25	ECR2XPZ220M□□125025
	33	8.0	242	16×20	ECR2XPZ330M□□160020
	47	5.6	361	16×31.5	ECR2XPZ470M□□160031
	68	3.9	420	18×25.5	ECR2XPZ680M□□180025
	82	3.2	505	16×40	ECR2XPZ820M□□160040
		3.2	505	18×31.5	ECR2XPZ820M□□180031
	100	2.7	590	16×45	ECR2XPZ101M□□160045
		2.7	590	18×36	ECR2XPZ101M□□180036
	120	2.2	655	16×50	ECR2XPZ121M□□160050
		2.2	655	18×40	ECR2XPZ121M□□180040
	150	1.8	754	16×60	ECR2XPZ151M□□160060
		1.8	754	20×41	ECR2XPZ151M□□200041
	180	1.5	935	18×50	ECR2XPZ181M□□180050
		1.5	935	22×41	ECR2XPZ181M□□220041
	450 (500) 2W	3.3	96.5	50	10×12.5
4.7		67.8	70	10×16	ECR2WPZ4R7M□□100016
10		31.8	110	10×20	ECR2WPZ100M□□100020
22		14.5	180	12.5×25	ECR2WPZ220M□□125025
33		9.7	230	16×25.5	ECR2WPZ330M□□160025
47		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
100		3.9	480	16×40	ECR2WPZ820M□□160040
		3.2	560	18×36	ECR2WPZ101M□□180036
120		3.2	560	16×45	ECR2WPZ101M□□160045
		2.7	625	18×40	ECR2WPZ121M□□180040
150		2.7	625	16×50	ECR2WPZ121M□□160050
		2.1	720	16×60	ECR2WPZ151M□□160060
180		2.1	720	18×46	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.