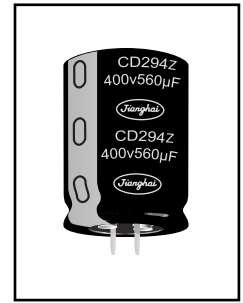
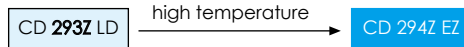


# CD 294Z EZ SERIES



2000h at 105°C

- Flame retardant
- Meet IEC 60695-2-2(B grade) standard
- Load life of 2000 hours at 105°C

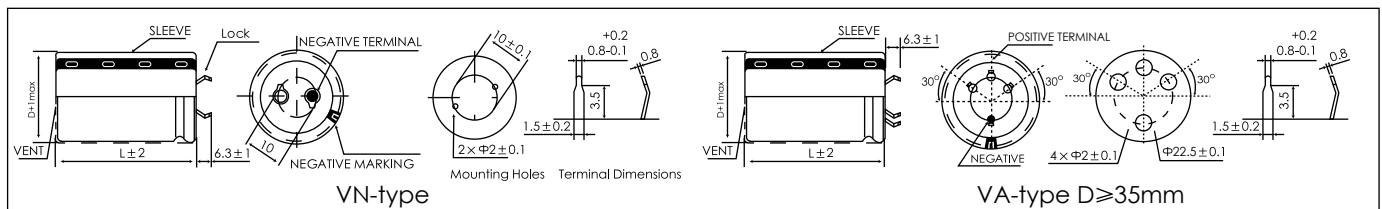


Items	Characteristics	
Operating Temperature Range(°C)	-25 ~ 105	
Voltage Range (V)	350 ~ 450	
Capacitance Range(µF)	56 ~ 680	
Capacitance Tolerance (20°C,120Hz)	± 20%	
Leakage Current (µA)	After 5 minutes at 20°C application of rated voltage, leakage $U_{rrent}$ is not more than 0.01CV or 1.5mA, whichever is smaller C:Nominal Capacitance(µF) V:Rated Voltage(V)	
Dissipation Factor (20°C, 120Hz)	WV (V)	350~450
	Tan δ	0.20
Stability at Low Temperature (Impedance Ratio at 120Hz)	Rated Voltage (v)	350~450
	$Z_{-25°C} / Z_{20°C}$	8

	Useful Life		Load Life	Endurance Life	Shelf Life
Life Time	4000h	≥200000h	200h	3000h	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 200% 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	$U_r$ $I_r=0$ 105°C No voltage applied After test: $U_r$ to be applied for 30min, 24 to 48h before measurement

## Dimensions

mm



## Frequency Coefficient

Frequency (Hz)	50	120	300	1K	10K	≥50K
Factor	0.75	1.00	1.16	1.30	1.41	1.45

## Temperature Coefficient

Temperature (°C)	+40	+55	+70	+85	+105
Coefficient	2.7	2.5	2.1	1.7	1.0

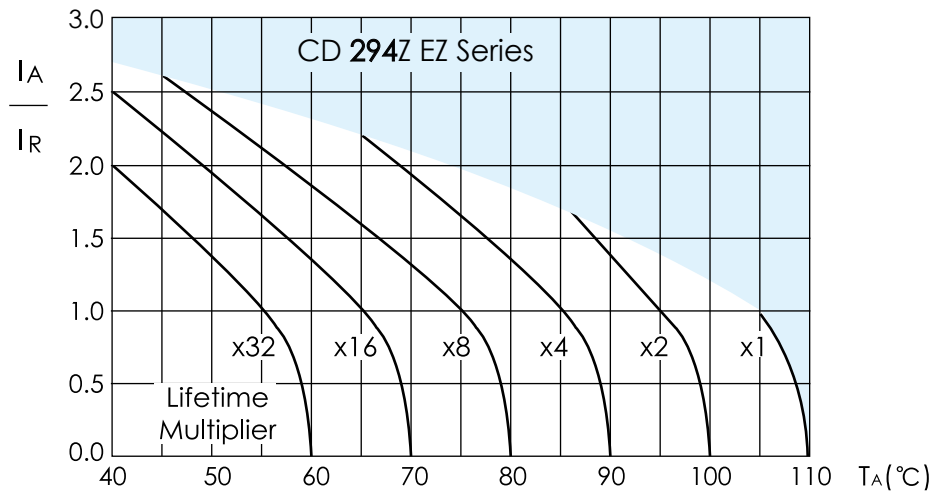
## Ratings for CD 294Z EZ Series

$U_r$ (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)	(mΩ)	(mΩ)	(Arms)	(mm)	-
350 (400) 2V	100	2653.93	928.87	0.70	22x25	ECS2VEZ101M □□ 220025
	120	2211.61	774.06	0.77	22x30	ECS2VEZ121M □□ 220030
	120	2211.61	774.06	0.75	25x25	ECS2VEZ121M □□ 250025
	150	1769.29	619.25	0.85	22x35	ECS2VEZ151M □□ 220035
	180	1474.40	516.04	0.93	22x40	ECS2VEZ181M □□ 220040
	180	1474.40	516.04	0.91	25x35	ECS2VEZ181M □□ 250035
	180	1474.40	516.04	0.89	30x25	ECS2VEZ181M □□ 300025
	220	1206.33	422.22	1.07	22x45	ECS2VEZ221M □□ 220045
	220	1206.33	422.22	1.05	25x40	ECS2VEZ221M □□ 250040
	270	982.94	344.03	1.13	22x50	ECS2VEZ271M □□ 220050
	270	982.94	344.03	1.11	25x45	ECS2VEZ271M □□ 250045
	270	982.94	344.03	1.10	30x35	ECS2VEZ271M □□ 300035
	270	982.94	344.03	1.05	35x25	ECS2VEZ271M □□ 350025
	330	804.22	281.48	1.25	25x50	ECS2VEZ331M □□ 250050
	330	804.22	281.48	1.23	30x40	ECS2VEZ331M □□ 300040
	330	804.22	281.48	1.20	35x30	ECS2VEZ331M □□ 350030
	390	680.49	238.17	1.32	30x40	ECS2VEZ391M □□ 300040
	390	680.49	238.17	1.29	35x35	ECS2VEZ391M □□ 350035
	470	564.67	197.63	1.41	30x45	ECS2VEZ471M □□ 300045
	470	564.67	197.63	1.38	35x40	ECS2VEZ471M □□ 350040
560	473.92	165.87	1.50	30x50	ECS2VEZ561M □□ 300050	
560	473.92	165.87	1.49	35x45	ECS2VEZ561M □□ 350045	
680	473.92	165.87	1.71	35x50	ECS2VEZ681M □□ 350050	
400 (450) 2G	68	3902.84	1268.42	0.56	22x25	ECS2GEZ680M □□ 220025
	100	2653.93	862.53	0.67	25x25	ECS2GEZ101M □□ 250025
	120	2211.61	718.77	0.74	22x35	ECS2GEZ121M □□ 220035
	120	2211.61	718.77	0.72	25x30	ECS2GEZ121M □□ 250030
	150	1769.29	575.02	0.83	22x40	ECS2GEZ151M □□ 220040
	150	1769.29	575.02	0.81	25x30	ECS2GEZ151M □□ 250030
	150	1769.29	575.02	0.79	30x25	ECS2GEZ151M □□ 300025
	180	1474.40	479.18	0.93	22x50	ECS2GEZ181M □□ 220050
	180	1474.40	479.18	0.90	25x35	ECS2GEZ181M □□ 250035
	220	1206.33	392.06	1.03	25x40	ECS2GEZ221M □□ 250040
	220	1206.33	392.06	1.01	30x30	ECS2GEZ221M □□ 300030
	220	1206.33	392.06	0.97	35x25	ECS2GEZ221M □□ 350025
	270	982.94	319.45	1.23	25x50	ECS2GEZ271M □□ 250050
	270	982.94	319.45	1.22	30x40	ECS2GEZ271M □□ 300040
	270	982.94	319.45	1.18	35x30	ECS2GEZ271M □□ 350030
	330	804.22	261.37	1.44	30x45	ECS2GEZ331M □□ 300045
	330	804.22	261.37	1.40	35x35	ECS2GEZ331M □□ 350035
	390	680.49	221.16	1.54	30x45	ECS2GEZ391M □□ 300045
	390	680.49	221.16	1.52	35x40	ECS2GEZ391M □□ 350040
	470	564.67	183.52	1.71	35x45	ECS2GEZ471M □□ 350045
560	473.92	154.02	1.91	35x50	ECS2GEZ561M □□ 350050	
450 (500) 2W	56	4739.16	1303.27	0.48	22x25	ECS2WEZ560M □□ 220025
	82	3236.50	890.04	0.59	22x30	ECS2WEZ820M □□ 220030
	82	3236.50	890.04	0.56	25x25	ECS2WEZ121M □□ 250025
	100	2653.93	729.83	0.65	22x35	ECS2WEZ101M □□ 220035
	120	2211.61	608.19	0.71	22x40	ECS2WEZ121M □□ 220040
	120	2211.61	608.19	0.70	25x30	ECS2WEZ121M □□ 250030
	120	2211.61	608.19	0.65	30x25	ECS2WEZ121M □□ 300025
	150	1769.29	486.55	0.78	22x45	ECS2WEZ151M □□ 220045
	150	1769.29	486.55	0.77	25x35	ECS2WEZ151M □□ 250035
	180	1474.40	405.46	0.88	22x50	ECS2WEZ181M □□ 220050
	180	1474.40	405.46	0.87	25x40	ECS2WEZ181M □□ 250040
	180	1474.40	405.46	0.86	30x30	ECS2WEZ181M □□ 300030
	220	1206.33	331.74	1.03	25x50	ECS2WEZ221M □□ 250050
	220	1206.33	331.74	1.01	30x35	ECS2WEZ221M □□ 300035
	270	982.94	270.31	1.23	30x40	ECS2WEZ271M □□ 300040
	330	804.22	221.16	1.35	30x45	ECS2WEZ331M □□ 300045
	330	804.22	221.16	1.32	35x35	ECS2WEZ331M □□ 350035
	390	680.49	187.14	1.61	30x50	ECS2WEZ391M □□ 300050
	390	680.49	187.14	1.60	35x45	ECS2WEZ391M □□ 350045
	470	564.67	155.28	1.75	35x50	ECS2WEZ471M □□ 350050

SNAP-IN/LUG

Customer products are available on request.

## Lifetime Diagram



$I_A$  = actual ripple current at 120Hz,  $I_R$  = rated ripple current at 120Hz, 105°C  
Multiplier of Useful Life as a function of ambient temperature and ripple current load