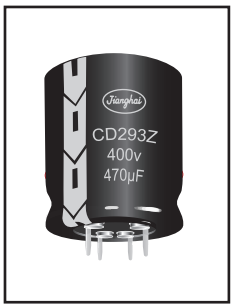
CD 293Z LD SERIES

SNAP-IN/LUG

5000h at 85℃

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

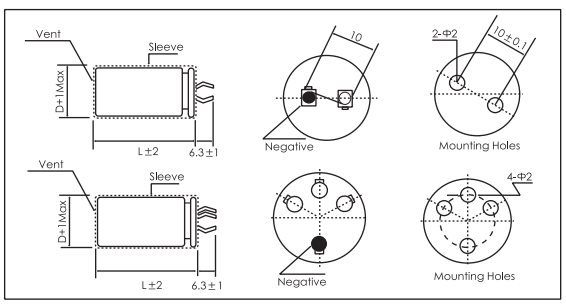
CD **293** BZ → (longer life) CD **293Z LD**
Flame retardant



Items	Characteristics
Operating Temperature Range (℃)	-25 ~ +85
Voltage Range (V)	350 ~ 450
Capacitance Range (μF)	68 ~ 1000
Capacitance Tolerance (20℃, 120Hz)	± 20%
Leakage Current (μA)	After 5 minutes at 20℃ application of rated voltage, leakage current is not more than 0.01CV or 1.5mA, whichever is smaller. C: Nominal Capacitance (μF) V: Rated Voltage (V)
Dissipation Factor (20℃, 120Hz)	Rated Voltage (V): 350~450; Tan δ (max): 0.15
Stability at Low Temperature (Impedance Ratio at 120Hz)	Rated Voltage (V): 350~450; $Z_{-25℃}/Z_{+20℃}$: 4

	Useful Life		Load Life	Endurance Test	Shelf Life
Lifetime	6000h	>100000h	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 ± 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 130% of specified value	Not more than 200% of specified value
Condition: Applied Voltage Applied Current Applied Temperature	U_R I_R 85℃	U_R 1.2 x I_R 40℃	U_R I_R 85℃	U_R I_R = 0 85℃	U_R = 0 I_R = 0 85℃ After test: U_R to be applied for 30min >24h before measurement

Dimensions mm



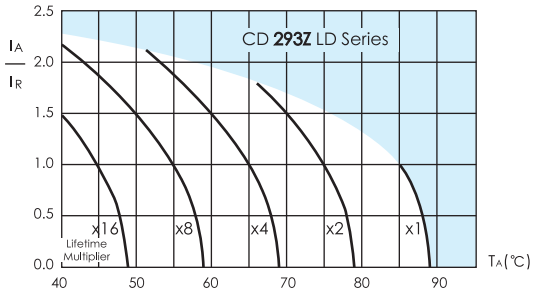
Temperature Coefficient

Temperature(℃)	+40	+55	+70	+85
Factor	1.7	1.5	1.3	1.0

Frequency Coefficient

Frequency	50/60Hz	120Hz	300Hz	1kHz	10kHz	≥50kHz
Factor	0.80	1.00	1.16	1.30	1.41	1.43

Lifetime Diagram



I_A = actual ripple current at 120Hz, I_R = rated ripple current at 120Hz, 85℃
Multiplier of Useful Life as a function of ambient temperature and ripple current load

Ratings for CD **293Z** LD Series

U_R (Surge Voltage) Code	Rated Capa-citance	Max ESR 20℃, 120Hz	Typ ESR 20℃, 120Hz	Rated Ripple Current 85℃, 120Hz	Size ΦD x L	P/N
(V)	(μF)	(mΩ)	(mΩ)	(Arms)	(mm)	-
350 (400) 2V	82	2427	1941	0.64	22×25	ECS2VLD820M□□220025
	100	1990	1592	0.80	22×25	ECS2VLD101M□□220025
	120	1658	1327	0.82	22×30	ECS2VLD121M□□220030
		1658	1327	0.81	25×25	ECS2VLD121M□□250025
	150	1327	1062	0.94	22×35	ECS2VLD151M□□220035
		1327	1062	0.94	25×30	ECS2VLD151M□□250030
	180	1106	885	1.1	22×40	ECS2VLD181M□□220040
		1106	885	1.1	30×25	KCS2VLD181M□□300025
	220	905	724	1.2	22×45	ECS2VLD221M□□220045
		905	724	1.2	25×35	ECS2VLD221M□□250035
		905	724	1.2	30×30	ECS2VLD221M□□300030
		905	724	1.3	35×25	ECS2VLD221M□□350025
	270	737	590	1.4	25×45	ECS2VLD271M□□250045
		737	590	1.4	30×35	ECS2VLD271M□□300035
	330	603	483	1.6	25×50	ECS2VLD331M□□250050
		603	483	1.6	35×30	ECS2VLD331M□□350030
	390	511	409	1.7	30×40	ECS2VLD391M□□300040
		511	409	1.8	35×35	ECS2VLD391M□□350035
	470	424	339	2.0	30×45	ECS2VLD471M□□300045
		424	339	2.0	35×40	ECS2VLD471M□□350040
	560	356	285	2.3	35×45	ECS2VLD561M□□350045
	680	293	535	2.6	35×50	ECS2VLD681M□□350050
	820	243	195	2.8	35×60	ECS2VLD821M□□350060
400 (450) 2G	68	2926	2341	0.55	22×25	ECS2GLD680M□□220025
	82	2427	1941	0.65	22×25	ECS2GLD820M□□220025
	100	1990	1592	0.70	22×30	ECS2GLD101M□□220030
		1990	1592	0.70	25×25	ECS2GLD101M□□250025
	120	1658	1327	0.79	22×30	ECS2GLD121M□□220030
	150	1327	1062	0.90	22×35	ECS2GLD151M□□220035
		1327	1062	0.89	25×30	ECS2GLD151M□□250030
	180	1106	885	1.0	22×40	ECS2GLD181M□□220040
		1106	885	1.0	25×30	ECS2GLD181M□□250030
	220	905	724	1.1	22×50	ECS2GLD221M□□220050
		905	724	1.2	25×40	ECS2GLD221M□□250040
	270	737	590	1.3	25×45	ECS2GLD271M□□250045
		737	590	1.5	30×30	ECS2GLD271M□□300030
	330	603	483	1.6	25×45	ECS2GLD331M□□250045
		603	483	1.7	30×35	ECS2GLD331M□□300035
	390	511	409	1.8	35×30	ECS2GLD391M□□350030
		511	409	1.9	30×40	ECS2GLD391M□□300040
	470	424	339	2.1	35×35	ECS2GLD471M□□350035
	560	356	285	2.3	35×40	ECS2GLD561M□□350040
	680	293	235	2.7	35×45	ECS2GLD681M□□350045
	820	242	194	3.1	35×50	ECS2GLD821M□□350050
	1000	133	107	3.7	35×65	ECS2GLD102M□□350065
420 (470) 2X	100	1990	1592	0.71	22×30	ECS2XLD102M□□220030
		1990	1592	0.72	25×25	ECS2XLD102M□□250025
	120	1658	1327	0.81	22×35	ECS2XLD121M□□220035
		1658	1327	0.82	25×30	ECS2XLD121M□□250030
	150	1327	1062	0.96	25×30	ECS2XLD151M□□250030
	180	1106	885	1.1	25×35	ECS2XLD181M□□250035
		1106	885	1.2	30×30	ECS2XLD181M□□300030
	220	905	724	1.2	25×40	ECS2XLD221M□□250040
		905	724	1.3	30×30	ECS2XLD221M□□300030
	270	737	590	1.3	25×45	ECS2XLD271M□□250045
		737	590	1.4	30×35	ECS2XLD271M□□300035
	330	603	483	1.7	30×40	ECS2XLD331M□□300040
	390	511	409	1.8	30×45	ECS2XLD391M□□300045
		511	409	1.9	35×35	ECS2XLD391M□□350035
	470	424	339	2.1	30×50	ECS2XLD471M□□300050
		424	339	2.2	35×40	ECS2XLD471M□□350040
	560	356	285	2.4	35×45	ECS2XLD561M□□350045
	680	293	235	2.8	35×50	ECS2XLD681M□□350050
	820	242	194	3.2	35×60	ECS2XLD821M□□350060
	1000	133	107	4.0	40×60	ECS2XLD102M□□400060
450 (500) 2W	68	2926	2341	0.57	22×25	ECS2WLD680M□□220025
	82	2427	1941	0.68	22×30	ECS2WLD820M□□220030
	100	1990	1592	0.73	25×25	ECS2WLD101M□□250025
	120	1658	1327	0.80	22×35	ECS2WLD121M□□220035
		1658	1327	0.83	25×30	ECS2WLD121M□□250030
	150	1327	1062	0.95	22×45	ECS2WLD151M□□220045
		1327	1062	0.95	25×35	ECS2WLD151M□□250035
	180	1106	885	1.1	25×40	ECS2WLD181M□□250040
		1106	885	1.1	30×30	ECS2WLD181M□□300030
	220	905	724	1.2	25×45	ECS2WLD221M□□250045
		905	724	1.3	30×35	ECS2WLD221M□□300035
	270	737	590	1.5	30×40	ECS2WLD271M□□300040
	330	603	480	1.7	30×45	ECS2WLD331M□□300045
	390	511	409	1.9	35×40	ECS2WLD391M□□350040
	470	424	339	2.2	30×50	ECS2WLD471M□□300050
	560	356	285	2.4	35×50	ECS2WLD561M□□350050
	680	293	235	2.8	35×55	ECS2WLD681M□□350055
	820	242	194	3.2	35×60	ECS2WLD821M□□350060
	1000	133	107	4.2	35×80	ECS2WLD102M□□350080
		133	107	4.1	40×65	ECS2WLD102M□□400065

Customer products are available on request.