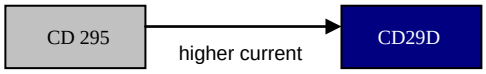
CD29D Snap In Aluminum Electrolytic Capacitors

HUASING

5000h at 85℃

- Small Size
- Long Useful Life
- HigHRipple Current
- Industrial Power Supplies and Inverters



Items	Characteristics
Operating Temperature Range(°C)	-40 ~ +85
Voltage Range (V)	160~450
Capacitance Range(μF)	47~2200
Capacitance Tolerance (20°C,120Hz)	±20%
Leakage Current (μA)	After 5 minutes at 20°C 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°C, 120Hz)	Rated Voltage(V): 160 / 200 / 250 / 400 / 450 Tan δ(max): 0.15 / 0.12
Stability at Low Temperature (Impedance Ratio at 120Hz)	Rated Voltage(V): 160~450 $Z_{-40°C}/Z_{+20°C}$: 4

	Useful Life		Load Life	Endurance Test	Shelf Life
Life Time	7000h	＞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 than200% of specified value	Not more than 200% of specified value
Condition: Applied Voltage Applied Current Applied Temperature	U_R I_R 85°C	U_R $1.2 \times I_R$ 40°C	U_R I_R 85°C	U_R I_R= 0 85°C	U_R= 0 I_R= 0 85°C After test: U_R to be applied for 30min>24h before measurement

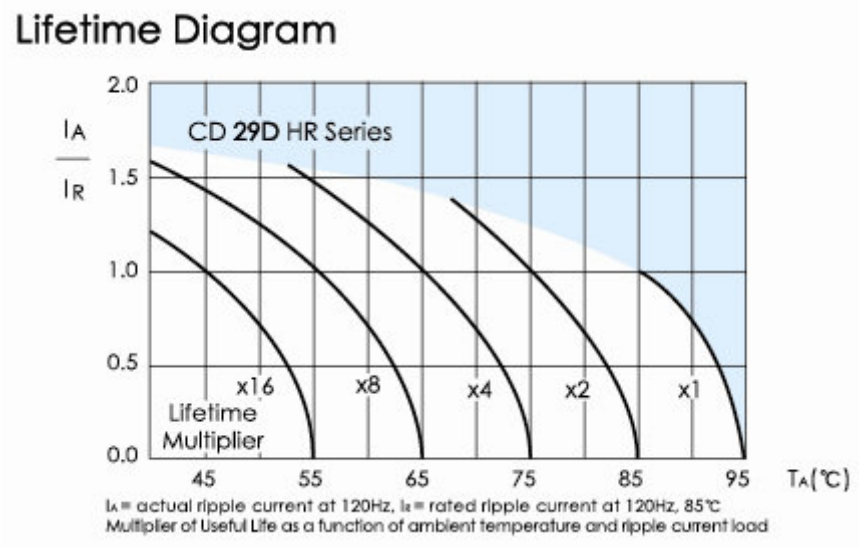
Frequency coefficient

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

Temperature Coefficient

Temperature(°C)	+40	+55	+70	+85
coefficient	1.7	1.5	1.3	1.0

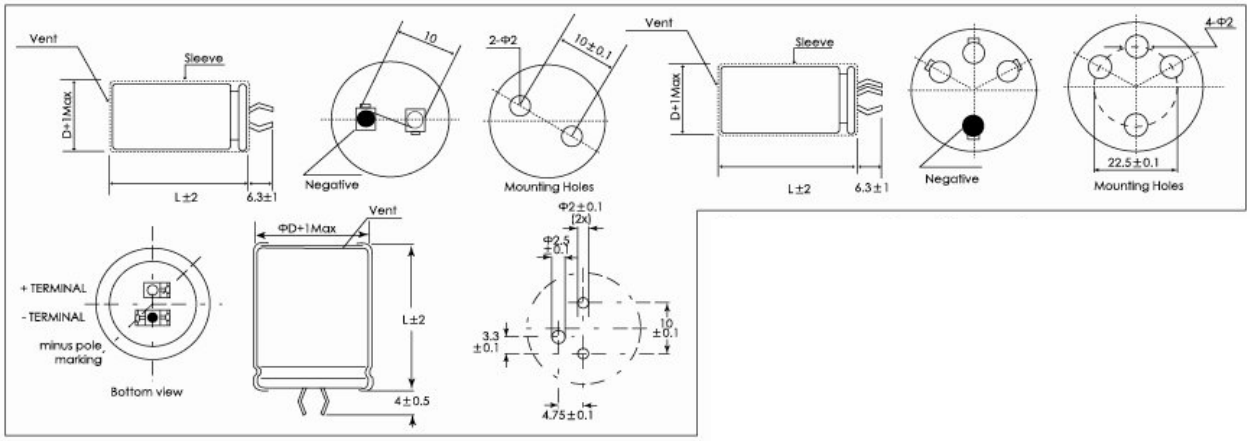
Lifetime Diagram



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

Dimensions

mm



U_R (Surge Voltage) Code	Rated Capacitance	Max ESR 20℃, 120Hz	Typ ESR 20℃, 120Hz	Rated Ripple Current 105℃, 100kHz	Size ΦDxL
(v)	(μF)	(mΩ)	(mΩ)	(Arms)	(mm)
160 (200) 2C	330	603	355	1.5	22x25
	390	510	300	1.6	25x25
	470	424	245	1.8	22X35
	560	355	215	2.1	22X35
		355	215	2.2	25X30
		355	215	2.1	30X25
	680	293	178	2.6	22X40
		293	178	2.5	25X35
	820	243	145	2.8	22X50
		243	145	2.7	25X40
		243	145	2.9	30X30
		243	145	2.8	35X25
	1000	199	115	3.3	25X45
		199	115	3.4	30X35
		199	115	3.3	35X30
	1200	166	95	3.7	25X50
		166	95	3.8	30X40
		166	95	3.6	35X35
	1500	133	75	4.4	30X45
		133	75	4.3	35X40
	1800	111	75	4.4	35X45
	2200	91	58	4.9	35X50
200 (250) 2D	220	905	375	1.2	22X25
	330	603	258	1.5	22X30
		603	258	1.6	25X25
	390	510	221	1.8	22X35
		510	221	1.8	25X30
	470	424	175	2	22X40
		424	175	2.1	30X25
	560	355	150	2.2	22X45
		355	150	2.2	25X35
		355	150	2.3	30X30
		355	150	2.2	35X25
	680	293	128	2.6	25X40
		293	128	2.4	30X30
	820	243	105	2.7	25X50
		243	105	2.8	30X40
		243	105	2.6	35X30
	1000	199	80	3.4	30X40
		199	80	3.6	35X35
	1200	166	70	3.8	30X50
		166	70	3.7	35X40
	1500	133	55	4.2	35X50
250 (300) 2E	150	1327	550	0.92	22X25
	180	1106	470	0.98	22X25
	220	905	370	1.25	22X30
		905	370	1.25	25X25
	270	737	370	1.25	22X35
	330	603	250	1.64	22X40
		603	255	1.64	25X30
		603	255	1.64	30X25
	390	510	220	1.9	22X45
		510	220	1.9	25X35
	470	424	175	2.2	22X50
		424	175	2.2	25X40
		424	175	2.2	30X30
		424	175	2.2	35X25

Ratings for CD29D Series

U_R (Surge Voltage) Code	Rated Capacitance	Max ESR 20℃, 120Hz	Typ ESR 20℃, 120Hz	Rated Ripple Current 105℃, 100KHz	Size ΦDxL
(v)	(μF)	(mΩ)	(mΩ)	(Arms)	(mm)
250) 2E	560	355	150	2.4	25X45
		355	150	2.4	30X35
	680	293	123	2.8	30X40
		293	123	2.8	35X30
	820	243	105	3.2	30X45
		243	105	3.2	35X35
	1000	199	80	3.7	35X40
	1200	166	70	4.1	35X45
	1500	133	60	4.6	35X50
400 (450) 2G	68	2342	960	0.62	22X25
	100	1592	600	0.81	22X30
		1592	660	0.83	25X25
	120	1327	550	0.93	22X35
	150	1062	440	1.2	22X40
		1062	440	1.2	25X30
		1062	440	1.2	30X25
	180	885	360	1.3	22X45
		885	360	1.3	25X35
		885	360	1.3	30X30
		885	180	1.3	35X25
	220	724	300	1.5	22X50
		724	300	1.5	25X40
		724	300	1.5	30X35
	270	590	240	1.7	25X45
		590	240	1.7	30X40
		590	240	1.7	35X30
	330	483	200	2.1	30X45
		483	200	2.1	35X35
	390	408	170	2.3	30X50
		408	170	2.3	35X40
	470	339	140	2.7	35X45
	560	284	110	3	35X50
450 (500) 2W	47	3388	2800	0.52	22X25
	68	2342	1940	0.66	22X30
		2342	1940	0.66	25X25
	100	1592	1310	0.9	22X35
		1592	1310	0.9	25X30
		1592	1310	0.9	30X25
	120	1327	910	1.1	22X40
		1327	910	1.1	25X35
	150	1062	880	1.3	22X50
		1062	880	1.3	25X40
		1062	880	1.3	30X30
	180	885	740	1.4	25X45
		885	740	1.4	30X35
		885	740	1.4	35X25
	220	724	590	1.6	25X50
		724	590	1.6	30X40
		724	590	1.6	35X30
	270	590	490	1.9	30X45
		590	490	1.9	35X35
	330	483	395	2.2	35X40
	390	408	300	2.4	35X45
	470	339	280	2.8	35X50