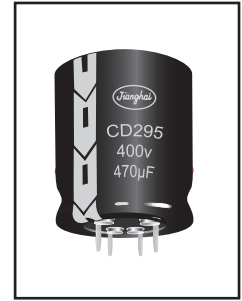
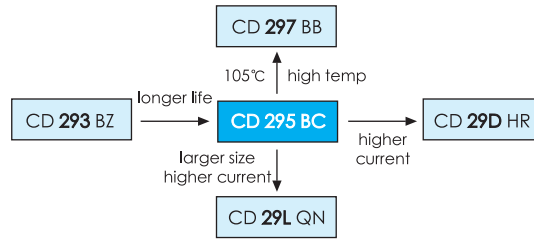


# CD 295 BC SERIES



5000h at 85°C

- Long Life at 85°C
- High Ripple Current
- Long Life General Industrial Electronics

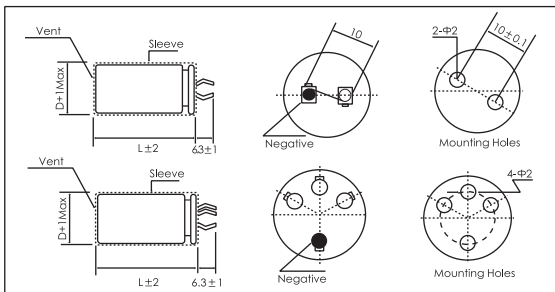


Items	Characteristics	
Operating Temperature Range (°C)	-40 ~ +85	-25 ~ +85
Voltage Range (V)	10 ~ 400	420 ~ 500
Capacitance Range (µF)	68 ~ 22000	
Capacitance Tolerance (20°C, 120Hz)	± 20%	
Leakage Current (µA)	After 5 minutes at 20°C application of rated voltage, leakage current is not more than 0.01CV or 1.5mA, whichever is smaller. C: Nominal Capacitance (µF) V: Rated Voltage (V)	
Dissipation Factor (20°C, 120Hz)	Rated Voltage (V)	10    16    25    35    50    63~100    160~500
	Tan δ (max)	0.80    0.60    0.50    0.40    0.30    0.20    0.15
Stability at Low Temperature (Impedance Ratio at 120Hz)	Rated Voltage (V)	10    16~35    50~100    160~200    250~400    420~500
	Z <sub>-25°C</sub> / Z <sub>+20°C</sub>	5    4    3    3    4
	Z <sub>-40°C</sub> / Z <sub>+20°C</sub>	18    15    10    6    8    -

	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 <sub>R</sub> I <sub>R</sub> 85°C	U <sub>R</sub> 1.2 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>c</sub> to be applied for 30min >24h before measurement

## Dimensions

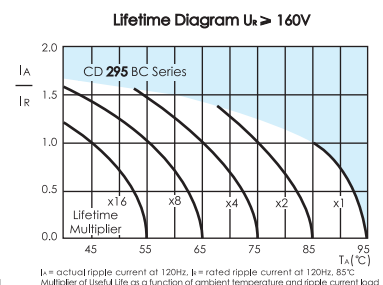
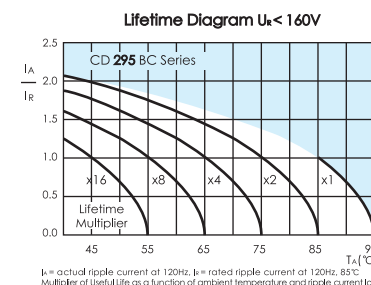
mm



## Frequency Coefficient

Voltage (V)	Frequency					
	50/60Hz	120Hz	300Hz	1kHz	10kHz	≥50kHz
≤ 50	0.88	1.00	1.07	1.15	1.15	1.15
63 ~ 100	0.80	1.00	1.17	1.32	1.45	1.50
≥ 160	0.80	1.00	1.16	1.30	1.41	1.43

## Lifetime Diagram



## Temperature Coefficient

Temperature(°C)	+40	+55	+70	+85
Rated Voltage(V) < 160	2.1	1.8	1.5	1.0
Rated Voltage(V) ≥ 160	1.7	1.5	1.3	1.0





## Ratings for CD 295 BC Series

$U_R$ (Surge Voltage) Code	Rated Capacitance	Max ESR 20°C, 120Hz	Typ ESR 20°C, 120Hz	Rated Ripple Current 85°C, 120Hz	Size $\Phi D \times L$	P/N
(V)	( $\mu F$ )	(m $\Omega$ )	(m $\Omega$ )	(Arms)	(mm)	-
450 (500) 2W	68	2927	2049	0.57	22×30	ECS2WBC680M□□220030
	82	2427	1699	0.64	22×35	ECS2WBC820M□□220035
	100	1990	1393	0.72	22×35	ECS2WBC101M□□220035
				0.73	25×30	ECS2WBC101M□□250030
	120	1659	1161	0.8	22×40	ECS2WBC121M□□220040
				0.83	25×35	ECS2WBC121M□□250035
	150	1327	929	0.95	22×50	ECS2WBC151M□□220050
				0.95	25×40	ECS2WBC151M□□250040
				0.98	30×30	ECS2WBC151M□□300030
	180	1106	774	1.1	25×45	ECS2WBC181M□□250045
				1.1	30×35	ECS2WBC181M□□300035
				1.2	35×25	ECS2WBC181M□□350025
	220	905	633	1.2	25×50	ECS2WBC221M□□250050
				1.3	30×40	ECS2WBC221M□□300040
				1.3	35×30	ECS2WBC221M□□350030
	270	737	516	1.4	30×45	ECS2WBC271M□□300045
				1.5	35×35	ECS2WBC271M□□350035
	330	603	423	1.7	30×50	ECS2WBC331M□□300050
	390	510	357	1.9	35×45	ECS2WBC391M□□350045
	470	424	296	2.2	35×50	ECS2WBC471M□□350050
560	356	285	2.4	35×55	ECS2WBC561M□□350055	
680	293	235	2.8	35×60	ECS2WBC681M□□350060	
			2.8	40×50	ECS2WBC681M□□400050	
820	242	194	3.2	35×65	ECS2WBC821M□□350065	
			3.3	40×60	ECS2WBC821M□□400060	
1000	199	139	3.9	35×75	ECS2WBC102M□□350075	
500 (550) 2H	100	1990	1592	0.90	25×30	ECS2HBC101M□□250030
				0.88	30×25	ECS2HBC101M□□300025
	120	1658	1327	1.0	25×35	ECS2HBC121M□□250035
				1.0	30×30	ECS2HBC121M□□300030
				0.95	35×25	ECS2HBC121M□□350025
	150	1327	1062	1.2	25×40	ECS2HBC151M□□250040
				1.2	30×35	ECS2HBC151M□□300035
	180	1106	885	1.4	30×40	ECS2HBC181M□□300040
				1.3	35×30	ECS2HBC181M□□350030
	220	905	724	1.6	30×45	ECS2HBC221M□□300045
				1.5	35×35	ECS2HBC221M□□350035
	270	737	590	1.8	30×50	ECS2HBC271M□□300050
				1.7	35×40	ECS2HBC271M□□350040
	330	603	483	2.0	30×50	ECS2HBC331M□□300050
				1.9	35×45	ECS2HBC331M□□350045
	390	511	409	2.3	35×50	ECS2HBC391M□□350050
	470	424	339	2.5	35×60	ECS2HBC471M□□350060
	560	356	285	2.8	35×65	ECS2HBC561M□□350065
	680	293	235	3.2	35×70	ECS2HBC681M□□350070

Customer products are available on request.