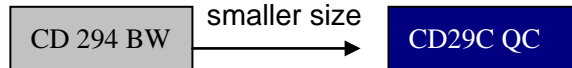


CD 29C QC SERIES



2000h at 105°C

- Load life 2000 hours at 105°C
- High ripple current
- Downsized from CD294
- PCB Mounting
- General industrial electronics



Items	Characteristics					
Operating Temperature Range(°C)	-40 ~ +105		-25~+105			
Rated Voltage Range (V)	200~250		400~450			
Capacitance Range(µF)	100~2700					
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 greater C:Nominal Capacitance(µF) V:Rated Voltage(V)					
Dissipation Factor (20°C, 120Hz)	Rated Voltage(V)	200	250	400	450	
	Tan δ(max)	0.15		0.20		
Stability at Low Temperature (Impedance ratio at 120Hz)	Rated Voltage(V)		200	250	400	450
	Impedance Ratio	Z _{-25°C} /Z _{+20°C}	4		8	
		Z _{-40°C} /Z _{+20°C}	12		-	

	Useful Life		Load Life	Endurance Test	Shelf Life
Life Time	4000h	≥180000h	2000h	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 130% of specified value	Not more than 200% of specified value
Condition:					After test: U _R to be applied for 30min>24h before measurement
Applied Voltage	U _R	U _R	U _R	U _R	
Applied Current	I _R	1.4×I _R	I _R	I _R = 0	
Applied Temperature	105°C	40°C	105°C	105°C	

Frequency coefficient

Frequency Voltage(v)	50/60Hz	120Hz	300Hz	1kHz	10kHz	≥ 50kHz
200~250	0.80	1.00	1.17	1.32	1.45	1.50
400~450	0.80	1.00	1.16	1.30	1.41	1.43

Temperature Coefficient

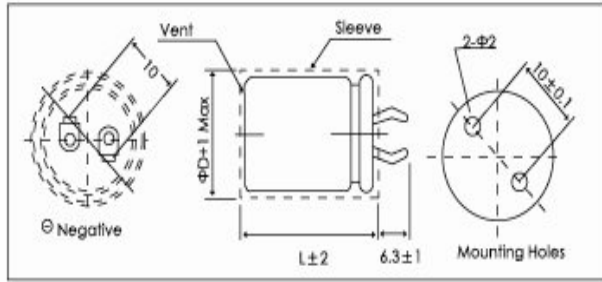
Temperature(°C)	+40	+55	+70	+80	+105
coefficient	2.7	2.5	2.1	1.7	1.0

CD 29C QC SERIES

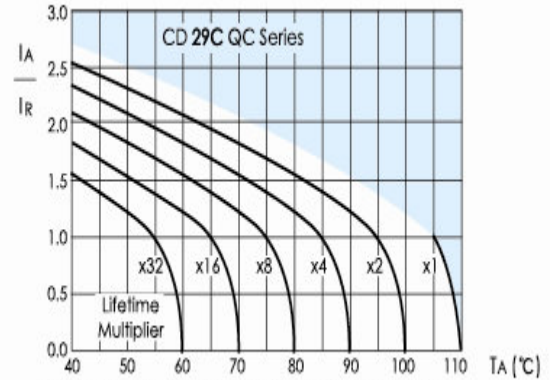


Dimensions

mm



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

Ratings for CD29C QC Series

U_R (Surge Voltage) Code	Rated Capacitance	Max ESR 20°C, 120Hz	Typ ESR 20°C, 120Hz	Rated Ripple Current 105°C, 100kHz	Size ΦDxL	P/N
(v)	(μF)	(mΩ)	(mΩ)	(Arms)	(mm)	-
200 (250) 2D	330	603	422	1.01	22x25	ECS2DQC331M□□220025
	390	510	357	1.10	22x30	ECS2DQC391M□□220030
	470	423	296	1.20	22x30	ECS2DQC471M□□220030
		423	296	1.20	25x25	ECS2DQC471M□□250025
	560	355	248	1.48	22x35	ECS2DQC561M□□220035
		355	248	1.48	25x30	ECS2DQC561M□□250030
	680	292	204	1.62	22x40	ECS2DQC681M□□220040
		292	204	1.60	25x30	ECS2DQC681M□□250030
		292	204	1.60	30x25	ECS2DQC681M□□300025
	820	242	169	1.75	22x45	ECS2DQC821M□□220045
		242	169	1.75	25x35	ECS2DQC821M□□250035
		242	169	1.75	30x30	ECS2DQC821M□□300030
	1000	199	139	2.04	22x50	ECS2DQC102M□□220050
		199	139	2.04	25x40	ECS2DQC102M□□250040
		199	139	2.04	30x35	ECS2DQC102M□□300035
		199	139	2.04	35x25	ECS2DQC102M□□350025
	1200	165	116	2.30	25x45	ECS2DQC122M□□250045
		165	116	2.30	30x35	ECS2DQC122M□□300035
	1500	132	92	2.57	30x40	ECS2DQC152M□□300040
		132	92	2.57	35x30	ECS2DQC152M□□350030
1800	110	77	2.68	30x50	ECS2DQC182M□□300050	
	110	77	2.68	35x35	ECS2DQC182M□□350035	
2200	90	63	2.92	35x45	ECS2DQC222M□□350045	
2700	73	51	3.30	35x50	ECS2DQC272M□□350050	
250 (300) 2E	220	904	633	0.95	22x25	ECS2EQC221M□□220025
	270	737	516	1.12	22x25	ECS2EQC271M□□220025
	330	603	422	1.21	22x30	ECS2EQC331M□□220030
		603	422	1.21	25x25	ECS2EQC331M□□250025
	390	510	357	1.38	22x35	ECS2EQC391M□□220035
		510	357	1.38	25x25	ECS2EQC391M□□250025
	470	423	296	1.56	22x40	ECS2EQC471M□□220040
		423	296	1.56	25x30	ECS2EQC471M□□250030
	560	355	248	1.74	22x45	ECS2EQC561M□□220045
		355	248	1.74	25x35	ECS2EQC561M□□250035
	680	292	204	1.92	22x50	ECS2EQC681M□□220050
		292	204	1.92	25x40	ECS2EQC681M□□250040
292		204	1.92	30x30	ECS2EQC681M□□300030	
820	242	169	2.13	25x45	ECS2EQC821M□□250045	

U_R (Surge Voltage) Code	Rated Capacitance	Max ESR 20°C, 120Hz	Typ ESR 20°C, 120Hz	Rated Ripple Current 105°C, 100kHz	Size ΦDxL	P/N
(v)	(μF)	(mΩ)	(mΩ)	(Arms)	(mm)	-
400 (450) 2G	120	1658	1161	0.65	22x25	ECS2GQC121M□□220025
	150	1658	774	0.73	22x30	ECS2GQC151M□□220030
	180	1105	774	0.73	25x25	ECS2GQC181M□□250025
	220	904	633	0.82	22x35	ECS2GQC221M□□220035
		904	633	0.87	25x30	ECS2GQC221M□□250030
	270	737	516	0.93	22x40	ECS2GQC271M□□220040
		737	516	1.05	25x35	ECS2GQC271M□□250035
		737	516	1.02	30x25	ECS2GQC271M□□300025
	330	603	422	1.16	22x50	ECS2GQC331M□□220050
		603	422	1.14	25x40	ECS2GQC331M□□250040
		603	422	1.14	30x30	ECS2GQC331M□□300030
		603	422	1.13	35x25	ECS2GQC331M□□350025
	390	510	357	1.45	25x45	ECS2GQC391M□□250045
		510	357	1.47	30x35	ECS2GQC391M□□300035
		510	347	1.50	35x30	ECS2GQC391M□□350030
	470	423	296	1.54	25x50	ECS2GQC471M□□250050
		423	296	1.61	30x40	ECS2GQC471M□□300040
		423	296	1.50	35x30	ECS2GQC471M□□350030
	560	355	248	1.70	30x45	ECS2GQC561M□□300045
		355	248	1.67	35x35	ECS2GQC561M□□350035
680	292	204	1.82	30x50	ECS2GQC681M□□300050	
	292	204	1.87	35x40	ECS2GQC681M□□350040	
820	242	169	2.08	35x45	ECS2GQC821M□□350045	
	199	139	2.14	35x50	ECS2GQC821M□□350050	
450 (500) 2W	100	1990	1393	0.67	22x25	ECS2WQC101M□□220025
	120	1658	1161	0.71	22x30	ECS2WQC121M□□220030
		1658	1161	0.72	25x25	ECS2WQC121M□□250025
	150	1327	928	0.75	22x30	ECS2WQC151M□□220030
		1327	928	0.77	22x45	ECS2WQC151M□□220045
	180	1105	774	0.79	22x40	ECS2WQC181M□□220040
		1105	774	0.79	25x30	ECS2WQC181M□□250030
	220	904	633	0.85	22x45	ECS2WQC221M□□220045
		904	633	0.87	25x35	ECS2WQC221M□□250035
		904	633	0.89	30x30	ECS2WQC221M□□300030
	270	737	516	1.00	22x50	ECS2WQC271M□□220050
		737	516	1.10	25x40	ECS2WQC271M□□250040
737		516	1.01	30x30	ECS2WQC271M□□300030	
737		516	1.00	35x25	ECS2WQC271M□□350025	

CD 29C QC SERIES



	242	169	2.13	30x35	ECS2EQC821M□□300035							
1000	199	139	2.40	25X50	ECS2EQC102M□□250050	330	603	422	1.28	25x50	ECS2WQC331M□□250050	
	199	139	2.40	30X40	ECS2EQC102M□□300040		693	422	1.31	30x35	ECS2WQC331M□□300035	
	199	139	2.40	35x30	ECS2EQC102M□□350030		603	422	1.25	35x30	ECS2WQC331M□□350030	
1200	165	116	2.55	30X40	ECS2EQC122M□□300040	390	510	357	1.41	30X40	ECS2WQC391M□□300040	
							510	357	1.45	35x35	ECS2WQC391M□□350035	
1500	132	92	2.73	30x50	ECS2EQC152M□□300050	470	423	296	1.61	35x40	ECS2WQC471M□□350040	
	132	92	2.73	35x40	ECS2EQC152M□□350040		423	296	1.52	30x45	ECS2WQC471M□□300045	
1800	110	77	2.82	35X45	ECS2EQC182M□□350045	560	355	248	1.75	35x45	ECS2WQC561M□□350045	
2200	90	63	2.95	35x50	ECS2EQC222M□□350050	680	292	204	1.93	35x50	ECS2WQC681M□□350050	

Customer products are available on request