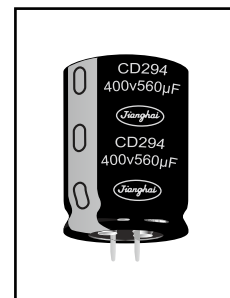
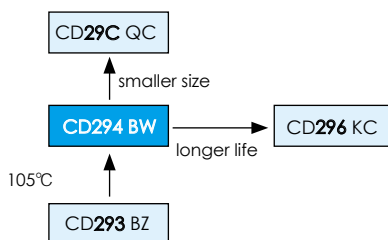


2000h at 105°C

- Standard 105°C
- General Industry

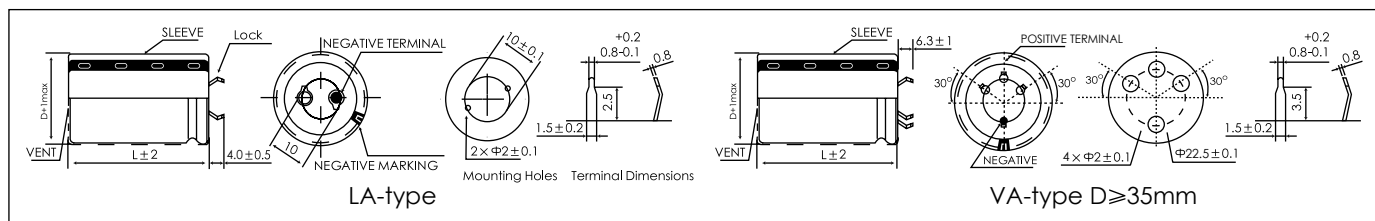


Items	Characteristics							
Operating Temperature Range (℃)	-40 ~ +105				-25 ~ +105			
Voltage range (V)	16 ~ 100				160 ~ 550			
Capacitance Range (μF)	100 ~ 47000							
Capacitance Tolerance (20℃ , 120Hz)	± 20%							
Leakage Current (μA)	After 5 minutes at 20℃ application of rated voltage, leakage 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)	16	25	35	50	63~100	160~400	420~550
	Tan δ (max)	0.50	0.40	0.35	0.30	0.20	0.15	0.20
Stability at Low Temperature (Impedance Ratio at 120Hz)	Rated Voltage (V)	16~100		160~200		250~500		550
	Z _{-25℃} / Z _{+20℃}	4						8
	Z _{-40℃} / Z _{+20℃}	15		-				

	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 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 x I _R 40°C	U _R I _R 105°C	U _R I _R = 0 105°C	After test: U _k to be applied for 30 min > 24h before measurement U _R = 0 I _R = 0 105°C

Dimensions

mm



Frequency Coefficient

Frequency	50/60Hz	120Hz	300Hz	1kHz	10kHz	≥ 50kHz
≤ 100	0.95	1.00	1.07	1.13	1.19	1.20
160 ~ 250	0.87	1.00	1.17	1.32	1.45	1.50
≥ 315	0.80	1.00	1.16	1.30	1.41	1.43

Temperature Coefficient

Temperature(°C)	+40	+55	+70	+85	+105
Coefficient	2.7	2.5	2.1	1.7	1.00

CD294 BW SERIES



Ratings for CD294 BW 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)	-
16 (20) 1C	12000	55	39	2.3	25×30	ECS1CBW123M □ □ 250030
	15000	44	31	2.68	25×35	ECS1CBW153M □ □ 250035
	18000	37	26	3.04	25×40	ECS1CBW183M □ □ 250040
		37	26	3	30×30	ECS1CBW183M □ □ 300030
	22000	30	21	3.4	25×45	ECS1CBW223M □ □ 250045
		30	21	3.39	30×35	ECS1CBW223M □ □ 300035
	27000	25	17	3.83	30×40	ECS1CBW273M □ □ 300040
		25	17	3.74	35×30	ECS1CBW273M □ □ 350030
	33000	20	14	4.3	30×45	ECS1CBW333M □ □ 300045
		20	14	4.24	35×35	ECS1CBW333M □ □ 350035
	39000	17	12	4.74	30×50	ECS1CBW393M □ □ 300050
		17	12	4.72	35×40	ECS1CBW393M □ □ 350040
25 (32) 1E	47000	14	10	5.27	35×45	ECS1CBW473M □ □ 350045
	8200	65	45	2.16	25×30	ECS1EBW822M □ □ 250030
	10000	53	37	2.44	25×35	ECS1EBW103M □ □ 250035
	12000	44	31	2.7	25×40	ECS1EBW123M □ □ 250040
		44	31	2.7	30×30	ECS1EBW123M □ □ 300030
	15000	35	25	3.15	25×45	ECS1EBW153M □ □ 250045
		35	25	3.13	30×35	ECS1EBW153M □ □ 300035
	18000	30	21	3.54	25×50	ECS1EBW183M □ □ 250050
		30	21	3.54	30×40	ECS1EBW183M □ □ 300040
	22000	24	17	4.24	30×45	ECS1EBW223M □ □ 300045
		24	17	3.96	35×35	ECS1EBW223M □ □ 350035
35 (44) 1V	27000	20	14	4.75	35×45	ECS1EBW273M □ □ 350045
	33000	16	11	5.39	35×50	ECS1EBW333M □ □ 350050
	5600	83	58	2.04	25×30	ECS1VBW562M □ □ 250030
	6800	68	48	2.31	25×35	ECS1VBW682M □ □ 250035
	8200	57	40	2.6	25×40	ECS1VBW822M □ □ 250040
		57	40	2.56	30×30	ECS1VBW822M □ □ 300030
	10000	46	33	2.92	25×45	ECS1VBW103M □ □ 250045
		46	33	2.92	30×35	ECS1VBW103M □ □ 300035
	12000	39	27	3.28	30×40	ECS1VBW123M □ □ 300040
		39	27	3.2	35×30	ECS1VBW123M □ □ 350030
	15000	31	22	3.74	30×45	ECS1VBW153M □ □ 300045
		31	22	3.69	35×35	ECS1VBW153M □ □ 350035
50 (63) 1H	18000	26	18	4.16	35×40	ECS1VBW183M □ □ 350040
	22000	21	15	4.92	35×50	ECS1VBW223M □ □ 350050
	3300	121	84	2	25×25	ECS1HBW332M □ □ 250025
	3900	102	72	2.28	25×3	ECS1HBW392M □ □ 250030
	4700	85	59	2.58	25×30	ECS1HBW472M □ □ 250030
	5600	71	50	2.81	25×35	ECS1HBW562M □ □ 250035
	680	59	41	3.37	25×40	ECS1HBW682M □ □ 250040
		59	41	3.39	30×35	ECS1HBW682M □ □ 300035
	8200	49	34	3.71	30×40	ECS1HBW822M □ □ 300040
		49	34	3.66	35×35	ECS1HBW822M □ □ 350035
	10000	40	28	4.09	30×45	ECS1HBW103M □ □ 300045
		40	28	4.07	35×40	ECS1HBW103M □ □ 350040
63 (79) 1J	12000	33	23	4.5	35×45	ECS1HBW123M □ □ 350045
	2200	121	84	1.75	25×30	ECS1JBW222M □ □ 250030
	2700	98	69	1.99	25×35	ECS1JBW272M □ □ 250035
	3300	80	56	2.27	25×40	ECS1JBW332M □ □ 250040
		80	56	2.24	30×30	ECS1JBW332M □ □ 300030
	3900	68	48	2.54	25×45	ECS1JBW392M □ □ 250045
		68	48	2.55	30×35	ECS1JBW392M □ □ 300035
	4700	57	40	2.88	25×50	ECS1JBW472M □ □ 250050
		57	40	2.9	30×40	ECS1JBW472M □ □ 300040
	5600	47	33	3.28	30×45	ECS1JBW562M □ □ 300045
		47	33	3.24	35×35	ECS1JBW562M □ □ 350035
	6800	39	27	3.73	30×50	ECS1JBW682M □ □ 300050
		39	27	3.71	35×40	ECS1JBW682M □ □ 350040
80 (100) 1K	8200	32	23	4.16	35×45	ECS1JBW822M □ □ 350045
	10000	27	19	4.69	35×50	ECS1JBW103M □ □ 350050
	1500	177	124	1.62	25×30	ECS1KBW152M □ □ 250030
	1800	147	103	1.81	25×30	ECS1KBW182M □ □ 250030
	2200	121	84	2.09	22×45	ECS1KBW222M □ □ 220045
		121	84	2.01	25×35	ECS1KBW222M □ □ 250035
	2700	98	69	2.43	30×35	ECS1KBW272M □ □ 300035
		80	56	2.78	30×40	ECS1KBW332M □ □ 300040
	3900	68	48	3.12	30×45	ECS1KBW392M □ □ 300045
	4700	57	40	3.5	35×40	ECS1KBW472M □ □ 350040
	5600	47	33	3.87	35×45	ECS1KBW562M □ □ 350045
	6800	39	27	4.19	35×50	ECS1KBW682M □ □ 350050
100 (125) 2A	1000	265	186	1.56	25×30	ECS2ABW102M □ □ 250030
	1200	221	155	1.76	25×35	ECS2ABW122M □ □ 250035
	1500	177	124	2.03	25×40	ECS2ABW152M □ □ 250040
		177	124	2	30×30	ECS2ABW152M □ □ 300030
	1800	147	103	2.28	25×45	ECS2ABW182M □ □ 250045
		147	103	2.27	30×35	ECS2ABW182M □ □ 300035
	2200	121	84	2.57	25×50	ECS2ABW222M □ □ 250050
		121	84	2.59	30×40	ECS2ABW222M □ □ 300040
	2700	98	69	2.94	30×45	ECS2ABW272M □ □ 300045
		80	56	3.32	30×50	ECS2ABW332M □ □ 300050
	3300	80	56	3.31	35×40	ECS2ABW332M □ □ 350040
	3900	68	48	3.69	35×45	ECS2ABW392M □ □ 350045
160 (200) 2C	4700	57	40	4.14	35×50	ECS2ABW472M □ □ 350050
	560	355	249	1.62	22×40	ECS2CBW561M □ □ 220040
		355	249	1.73	25×30	ECS2CBW561M □ □ 250030
	680	293	205	1.7	22×45	ECS2CBW681M □ □ 220045
		293	205	1.81	25×35	ECS2CBW681M □ □ 250035

U _r (Surge Voltage) Code	Rated Capaci- tance	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)	-	
160 (200) 2C	820	243	170	1.98	25×40	ECS2CBW821M □ □ 250040	
		243	170	1.98	30×30	ECS2CBW821M □ □ 300030	
	1000	199	139	2.04	25×45	ECS2CBW102M □ □ 250045	
		199	139	2.14	30×35	ECS2CBW102M □ □ 300035	
	1200	166	116	2.12	25×50	ECS2CBW122M □ □ 250050	
		166	116	2.22	30×40	ECS2CBW122M □ □ 300040	
	1500	133	93	2.46	30×45	ECS2CBW152M □ □ 300045	
		133	93	2.53	35×35	ECS2CBW152M □ □ 350035	
	1800	111	77	2.98	35×45	ECS2CBW182M □ □ 350045	
		91	63	3.1	35×50	ECS2CBW222M □ □ 350050	
	2700	74	51	3.77	35×55	ECS2CBW272M □ □ 350055	
	3300	60	42	4.33	35×60	ECS2CBW332M □ □ 350060	
	470	424	296	1.5	22×35	ECS2KBW471M □ □ 220035	
		424	296	1.62	25×30	ECS2KBW471M □ □ 250030	
	560	355	249	1.62	22×40	ECS2KBW561M □ □ 220040	
		355	249	1.69	25×35	ECS2KBW561M □ □ 250035	
	180 (225) 2K	680	293	205	1.72	25×40	ECS2KBW681M □ □ 250040
			293	205	1.74	30×30	ECS2KBW681M □ □ 300030
820		243	170	.78	25×45	ECS2KBW821M □ □ 250045	
		243	170	1.85	30×35	ECS2KBW821M □ □ 300035	
1000		199	139	1.91	25×50	ECS2KBW102M □ □ 250050	
		199	139	2.01	30×40	ECS2KBW102M □ □ 300040	
1200		166	116	2.19	30×45	ECS2KBW122M □ □ 300045	
1500		133	93	2.36	30×50	ECS2KBW152M □ □ 300050	
1800		111	77	2.67	35×45	ECS2KBW182M □ □ 350045	
2200		91	63	3.27	35×50	ECS2KBW222M □ □ 350050	
2700		74	52	3.92	35×60	ECS2KBW272M □ □ 350060	
200 (250) 2D		470	424	296	1.47	25×30	ECS2DBW471M □ □ 250030
	424		296	1.56	30×25	ECS2DBW471M □ □ 300025	
	560	355	249	1.58	25×35	ECS2DBW561M □ □ 250035	
		355	249	1.65	30×30	ECS2DBW561M □ □ 300030	
	680	293	205	1.8	25×40	ECS2DBW681M □ □ 250040	
		293	205	1.82	30×30	ECS2DBW681M □ □ 300030	
	820	243	170	1.99	30×35	ECS2DBW821M □ □ 300035	
	1000	199	139	2.17	22×50	ECS2DBW102M □ □ 220050	
		199	139	2.21	30×40	ECS2DBW102M □ □ 300040	
	1200	166	116	2.22	25×45	ECS2DBW122M □ □ 250045	
		166	116	2.28	30×40	ECS2DBW122M □ □ 300040	
	1500	133	93	2.59	30×50	ECS2DBW152M □ □ 300050	
		133	93	2.64	35×40	ECS2DBW152M □ □ 350040	
	1800	111	77	2.7	35×45	ECS2DBW182M □ □ 350045	
	2200	91	63	3.23	35×50	ECS2DBW222M □ □ 350050	
	250 (300) 2E	330	603	422	1.2	22×40	ECS2EBW331M □ □ 220040
			603	422	1.3	25×30	ECS2EBW331M □ □ 250030
		390	510	357	1.41	25×35	ECS2EBW391M □ □ 250035
470		424	296	1.52	25×40	ECS2EBW471M □ □ 250040	
		424	296	1.56	30×30	ECS2EBW471M □ □ 300030	
560		355	249	1.59	25×45	ECS2EBW561M □ □ 250045	
		355	249	1.61	30×30	ECS2EBW561M □ □ 300030	
680		293	205	1.66	25×50	ECS2EBW681M □ □ 250050	
		293	205	1.76	30×35	ECS2EBW681M □ □ 300035	
820		243	170	1.83	30×40	ECS2EBW821M □ □ 300040	
		243	170	1.82	35×35	ECS2EBW821M □ □ 350035	
1000		199	139	1.87	30×50	ECS2EBW102M □ □ 300050	
		199	139	1.99	35×40	ECS2EBW102M □ □ 350040	
1200		166	116	2.1	35×45	ECS2EBW122M □ □ 350045	
1500		133	93	2.7	35×50	ECS2EBW152M □ □ 350050	
1800		111	77	2.9	35×55	ECS2EBW182M □ □ 350055	
111		77	2.92	35×60	ECS2EBW182M □ □ 350060		
315 (365) 2F		180	1106	608	0.78	22×40	ECS2FBW181M □ □ 220040
	1106		608	0.85	25×25	ECS2FBW181M □ □ 250025	
	220	905	498	0.91	22×45	ECS2FBW221M □ □ 220045	
		905	498	0.94	25×30	ECS2FBW221M □ □ 250030	
	270	737	406	1	25×35	ECS2FBW271M □ □ 250035	
		737	406	0.98	30×25	ECS2FBW271M □ □ 300025	
	330	603	332	1.13	30×30	ECS2FBW331M □ □ 300030	
	390	510	281	1.20	30×35	ECS2FBW391M □ □ 300035	
	470	424	233	1.28	30×35	ECS2FBW471M □ □ 300035	
	560	355	196	1.46	30×40	ECS2FBW561M □ □ 300040	
	680	293	161	1.85	30×45	ECS2FBW681M □ □ 300045	
		293	161	1.88	35×35	ECS2FBW681M □ □ 350035	
	820	242	133	2.1	30×50	ECS2FBW821M □ □ 300050	
		242	133	2.15	35×40	ECS2FBW821M □ □ 350040	
	1000	199	109	2.42	30×55	ECS2FBW102M □ □ 300055	
		199	109	2.47	35×45	ECS2FBW102M □ □ 350045	
	1200	166	91	2.6	35×50	ECS2FBW122M □ □ 350050	
	350 (400) 2V	150	1327	730	0.82	25×30	ECS2VBW151M □ □ 250030
180		1106	608	0.89	25×35	ECS2VBW181M □ □ 250035	
220		905	498	0.97	25×40	ECS2VBW221M □ □ 250040	
		905	498	0.98	30×30	ECS2VBW221M □ □ 300030	
270		737	406	1.01	25×45	ECS2VBW271M □ □ 250045	
		737	406	1.05	30×30	ECS2VBW271M □ □ 300030	
330		603	332	1.16	25×45	ECS2VBW331M □ □ 250045	
		603	332	1.19	30×40	ECS2VBW331M □ □ 300040	
390		510	281	1.26	25×45	ECS2VBW391M □ □ 250045	
		510	281	1.29	30×40	ECS2VBW391M □ □ 300040	
470		424	233	1.35	30×50	ECS2VBW471M □ □ 300050	
		424	233	1.41	35×40	ECS2VBW471M □ □ 350040	
560		355	196	1.47	30×50	ECS2VBW561M □ □ 300050	

Ratings for CD294 BW 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	560	355	196	1.51	35×50	ECS2VBW561M □□ 350050
	680	293	161	1.92	30×55	ECS2VBW681M □□ 300055
	820	242	133	2.25	35×50	ECS2VBW821M □□ 350050
	1000	199	109	2.5	35×60	ECS2VBW102M □□ 350060
	1200	1659	863	0.64	22×30	ECS2GBW121M □□ 220030
400 (450) 2G	120	1659	863	0.7	25×25	ECS2GBW121M □□ 250025
	150	1327	690	0.73	25×30	ECS2GBW151M □□ 250030
	180	1106	575	0.82	30×25	ECS2GBW181M □□ 300025
	220	905	471	0.87	25×40	ECS2GBW221M □□ 250040
	270	737	383	0.94	22×40	ECS2GBW271M □□ 220040
	330	603	314	1.08	25×50	ECS2GBW331M □□ 250050
	390	510	265	1.13	30×40	ECS2GBW391M □□ 300040
	470	424	220	1.28	30×50	ECS2GBW471M □□ 300050
	560	355	185	1.5	35×40	ECS2GBW561M □□ 350040
	680	293	153	1.9	35×50	ECS2GBW681M □□ 350050
	820	242	126	2.1	35×60	ECS2GBW821M □□ 350060
	1000	199	109	2.5	30×70	ECS2GBW102M □□ 300070
	120	2212	1106	0.72	25×30	ECS2XBW121M □□ 250030
	150	1769	885	0.8	25×30	ECS2XBW151M □□ 250030
	180	1475	737	0.85	30×30	ECS2XBW181M □□ 300030
	220	1206	603	0.96	30×30	ECS2XBW221M □□ 300030
	270	983	492	1.06	30×35	ECS2XBW271M □□ 300035
	330	804	402	1.14	30×40	ECS2XBW331M □□ 300040
	390	681	340	1.25	35×30	ECS2XBW391M □□ 350030
	470	565	282	1.28	30×50	ECS2XBW471M □□ 300050
	560	473	237	1.45	35×40	ECS2XBW561M □□ 350040
420 (470) 2X	680	391	196	1.9	35×50	ECS2XBW681M □□ 350050
	820	324	162	2.2	35×60	ECS2XBW821M □□ 350060
	1000	265	139	2.6	35×65	ECS2XBW102M □□ 350065
	120	2212	1106	0.73	22×35	ECS2WBW121M □□ 220035
	150	1769	885	0.82	25×25	ECS2WBW151M □□ 250025
	180	1474	737	0.86	25×30	ECS2WBW181M □□ 250030
	220	1206	603	0.94	22×50	ECS2WBW221M □□ 220050
	270	983	492	1.11	30×30	ECS2WBW271M □□ 300030
	330	804	402	1.25	30×35	ECS2WBW331M □□ 300035
	390	681	340	1.36	30×40	ECS2WBW391M □□ 300040
	470	565	282	1.5	35×30	ECS2WBW471M □□ 350030
	560	473	237	1.7	35×40	ECS2WBW561M □□ 350040
	680	391	196	1.95	35×50	ECS2WBW681M □□ 350050
	820	324	162	2.15	35×60	ECS2WBW821M □□ 350060
	1000	265	139	2.6	35×65	ECS2WBW102M □□ 350065
450 (500) 2W	120	2212	1106	0.73	22×35	ECS2WBW121M □□ 220035
	150	1769	885	0.82	25×25	ECS2WBW151M □□ 250025
	180	1474	737	0.86	25×30	ECS2WBW181M □□ 250030
	220	1206	603	0.94	22×50	ECS2WBW221M □□ 220050
	270	983	492	1.11	30×30	ECS2WBW271M □□ 300030
	330	804	402	1.25	30×35	ECS2WBW331M □□ 300035
	390	681	340	1.36	30×40	ECS2WBW391M □□ 300040
	470	565	282	1.5	35×30	ECS2WBW471M □□ 350030
	560	473	237	1.7	35×40	ECS2WBW561M □□ 350040
	680	391	196	1.95	35×50	ECS2WBW681M □□ 350050
	820	324	162	2.15	35×60	ECS2WBW821M □□ 350060
	1000	265	139	2.6	35×65	ECS2WBW102M □□ 350065
	120	2212	1106	0.77	22×50	ECS2HBW121M □□ 220050
	150	1769	885	0.85	25×35	ECS2HBW151M □□ 250035
	180	1474	737	1.01	25×40	ECS2HBW181M □□ 250040
	220	1206	603	1.12	30×30	ECS2HBW221M □□ 300030
	270	983	492	1.29	30×35	ECS2HBW271M □□ 300035
	330	804	402	1.4	35×35	ECS2HBW331M □□ 350035
	390	681	340	1.6	35×45	ECS2HBW391M □□ 350045
500 (550) 2H	470	565	282	1.8	35×50	ECS2HBW471M □□ 350050
	560	473	237	1.9	35×60	ECS2HBW561M □□ 350060
	680	391	196	2.2	35×70	ECS2HBW681M □□ 350070
	150	1769	885	0.86	30×35	ECS2YBW151M □□ 300035
	180	1474	737	1.06	30×40	ECS2YBW181M □□ 300040
	220	1206	603	1.18	35×30	ECS2YBW221M □□ 350030
	270	983	492	1.23	35×35	ECS2YBW271M □□ 350035
	330	804	402	1.5	35×45	ECS2YBW331M □□ 350045
550 (600) 2Y	390	565	282	1.9	35×50	ECS2YBW391M □□ 350050
	470	473	237	2.1	35×60	ECS2YBW471M □□ 350060
	560	391	196	2.2	35×70	ECS2YBW561M □□ 350070
	680	324	162	2.2	35×80	ECS2YBW681M □□ 350080

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)	-
550 (600) 2Y	390	681	340	1.67	35×60	ECS2YBW391M □□ 350060
	470	565	282	1.9	35×60	ECS2YBW471M □□ 350060
	560	473	237	2.1	35×70	ECS2YBW561M □□ 350070
	680	324	162	2.2	35×80	ECS2YBW681M □□ 350080

Customer products are available on request.

Life Time Diagram

