

AVQC Series AEC-Q200

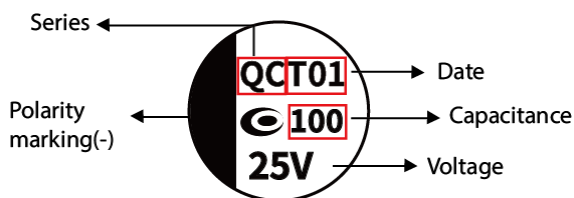
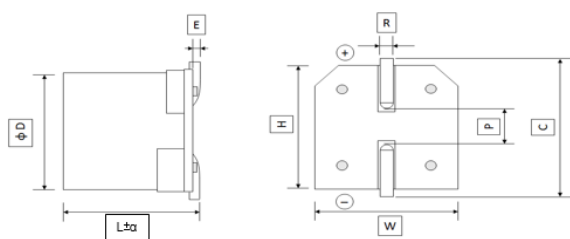
- Standard SMD type
- Rated Voltage:16~80V
- Endurance 4000hr at 125°C
- High reliability and high voltage are realized by hybrid electrolyte
- For high temperature and high reliability applications
- RoHS Compliant
- AEC-Q200 compliant



Specification

Category Temperature Range	-55~+125°C	Rated Voltage Range	16 to 80Vdc							
Rated Capacitance Range	10 to 820 (μF)	Capacitance Tolerance	±20% (M)							
Surge Voltage	Rated voltage X 1.25	Dissipation Factor (at 20°C 120Hz)	Rated Voltage (V)	16	25	35	50	63	80	
			tan δ(max)	0.16	0.14	0.12	0.1	0.08	0.08	
Leakage Current	Shall not exceed values shown in standard ratings (at 20°C after 2 mins.)									
Endurance	125°C, 4000hr, apply the rated ripple current without exceeding the rated voltage									
	Appearance	No significant damage								
	Capacitance Change	≤ ±30% of the initial value								
	DF(tanδ)	≤ 200% of the initial specified value								
	ESR	≤ 200% of the initial specified value								
	Leakage current	≤ The initial specified value								
Damp Heat (Steady State)	85°C, 85 to 90% RH, 2000hr, voltage applied									
	Appearance	No significant damage								
	Capacitance Change	≤ ±20% of the initial value								
	DF(tanδ)	≤ 200% of the initial specified value								
	ESR	≤ 200% of the initial specified value								
	Leakage current	≤ The initial specified value								
Surge Voltage	1,000 cycles and each one includes charge with surge voltage specified at 125°C for 0.5min through a protective resistor (R=1kΩ) and discharge for 5.5min.									
	Appearance	No significant damage								
	Capacitance Change	≤ ±20% of the initial value								
	DF(tanδ)	≤ 150% of the initial specified value								
	ESR	≤ 150% of the initial specified value								
	Leakage current	≤ The initial specified value								

Dimensions and Marking



Size code	ψD±0.5max (mm)	L (mm)	α (mm)	E (mm)	W±0.2 (mm)	H±0.2 (mm)	C±0.2 (mm)	R (mm)	P±0.2 (mm)
0606	6.3	5.8	±0.2	0.00~0.30	6.6	6.6	7.3	0.5~0.8	2.1
0608	6.3	7.5	±0.5	0.00~0.30	6.6	6.6	7.3	0.5~0.8	2.1
0810	8.0	9.7	±0.3	0.00~0.30	8.3	8.3	9.0	0.8~1.1	2.9
1010	10.0	10.2	±0.3	0.00~0.30	10.3	10.3	11.0	0.8~1.1	4.6
1012	10.0	12.3	±0.2	0.00~0.30	10.3	10.3	11.0	0.8~1.1	4.6
1016	10.0	16.5	±0.3	0.00~0.20	10.3	10.3	11.0	0.8~1.1	4.6

Ask factory for the current technical specifications before purchase and/or use

Should a safety concern arise regarding this product, please be sure to contact us immediately.

AVQC Series AEC-Q200

Standard Ratings

WV/Vdc (SV)	Cap (μF)	Size Code	Leakage Current (μA)	tanδ	ESR (mΩmax/20%, 100k to300kHz)	Rated Ripple Current (mArms/ 125°C /100kHz)	Part No.	
16 (20)	820	1010	131.2	0.16	18	2,800	160AVQC821M1010	
	47	0606	11.8	0.14	50	900	250AVQC470M0606	
	56	0606	14	0.14	50	900	250AVQC560M0606	
	68	0606	17	0.14	50	1,100	250AVQC680M0606	
	100	0606	25	0.14	50	1,300	250AVQC101M0606	
	100	0608	25	0.14	30	1,400	250AVQC101M0608	
	25 (31.3)	150	0608	37.5	0.14	30	1,800	250AVQC151M0608
		220	0810	55	0.14	27	2,900	250AVQC221M0810
		270	0810	67.5	0.14	27	2,900	250AVQC271M0810
		330	1010	82.5	0.14	20	3,500	250AVQC331M1010
470		1010	117.5	0.14	20	3,500	250AVQC471M1010	
470	1012	117.5	0.14	14	3,500	250AVQC471M1012		
35 (43.8)	27	0606	9.5	0.12	60	900	350AVQC270M0606	
	47	0606	16.5	0.12	60	900	350AVQC470M0606	
	47	0608	16.5	0.12	35	1,400	350AVQC470M0608	
	68	0608	23.8	0.12	35	1,400	350AVQC680M0608	
	100	0608	35	0.12	35	1,700	350AVQC101M0608	
	100	0810	35	0.12	27	1,900	350AVQC101M0810	
	150	0810	52.5	0.12	27	2,900	350AVQC151M0810	
	180	0810	63	0.12	27	2,900	350AVQC181M0810	
	220	1010	77	0.12	20	2,800	350AVQC221M1010	
	270	1010	94.5	0.12	20	3,500	350AVQC271M1010	
	330	1010	115.5	0.12	20	3,500	350AVQC331M1010	
	330	1012	115.5	0.12	14	3,500	350AVQC331M1012	
	470	1012	164.5	0.12	14	3,500	350AVQC471M1012	
470	1016	164.5	0.12	11	4,000	350AVQC471M1016		
50 (62.5)	22	0606	11	0.1	80	750	500AVQC220M0606	
	33	0608	16.5	0.1	40	1,100	500AVQC330M0608	
	47	0810	23.5	0.1	30	1,250	500AVQC470M0810	
	68	0810	34	0.1	30	2,700	500AVQC680M0810	
	100	1010	50	0.1	23	2,900	500AVQC101M1010	
	120	1010	60	0.1	25	2,900	500AVQC121M1010	
	150	1012	75	0.1	17	2,000	500AVQC151M1012	
	180	1012	90	0.1	17	3,200	500AVQC181M1012	
	220	1016	110	0.1	13	3,700	500AVQC221M1016	
63 (78.8)	10	0606	6.3	0.08	120	700	630AVQC100M0606	
	22	0608	13.9	0.08	80	900	630AVQC220M0608	
	33	0810	20.8	0.08	40	1,100	630AVQC330M0810	
	47	0810	29.6	0.08	32	2,400	630AVQC470M0810	

AP-CON HYBRID ALUMINUM ELECTROLYTIC CAPACITOR



	56	1010	35.3	0.08	30	2,800	630AVQC560M1010
	68	1010	42.8	0.08	30	2,800	630AVQC680M1010
	82	1010	51.7	0.08	30	2,800	630AVQC820M1010
	100	1010	63	0.08	30	2,800	630AVQC101M1010
	120	1012	75.6	0.08	19	3,000	630AVQC121M1012
	150	1016	94.5	0.08	15	3,500	630AVQC151M1016
80 (100)	22	0810	17.6	0.08	45	1,050	800AVQC220M0810
	47	1010	37.6	0.08	33	1,360	800AVQC470M1010
	56	1010	44.8	0.08	33	1,360	800AVQC560M1010