

AVQC Series AEC-Q200

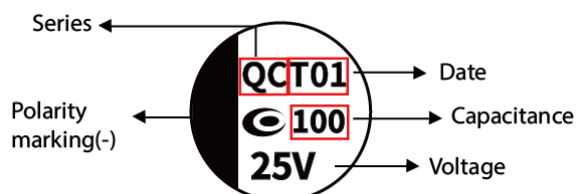
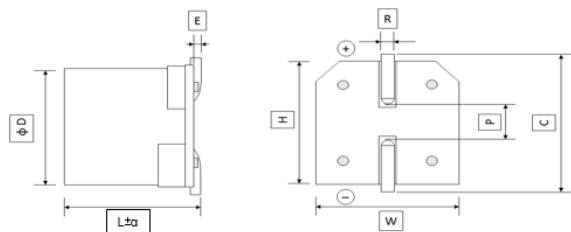
- Standard SMD type
- Rated Voltage: 25~80V
- Endurance 4000hr at 125°C
- High reliability and high voltage are realized by hybrid electrolyte
- For high temperature and high reliability applications
- RoHS Compliant
- AEC-Q200 compliant



Specification

Category Temperature Range	-55~+125°C	Rated Voltage Range	25 to 80Vdc					
Rated Capacitance Range	22 to 820 (μF)	Capacitance Tolerance	±20% (M)					
Surge Voltage	Rated voltage X 1.25	Dissipation Factor (at 20°C 120Hz)	Rated Voltage (V)	25	35	50	63	80
			tan δ(max)	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	ΦD±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)
0608	6.3	7.5	-0.5~+0.5	0.00~0.20	6.6	6.6	7.3	0.5~0.8	2.1
0810	8.0	9.7	-0.3~+0.3	0.00~0.20	8.3	8.3	9.0	0.8~1.1	2.9
1010	10.0	10.2	-0.3~+0.3	0.00~0.20	10.3	10.3	11.0	0.8~1.1	4.6
1012	10.0	12.3	-0.2~+0.2	0.00~0.20	10.3	10.3	11.0	0.8~1.1	4.6



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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.
25 (31.3)	100	0608	25	0.14	30	1,400	250AVQC101M0608
	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
35 (43.8)	47	0606	16.5	0.12	60	900	350AVQC470M0606
	68	0608	23.8	0.12	35	1,400	350AVQC680M0608
	100	0810	35	0.12	30	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
50 (62.5)	33	0608	16.5	0.1	40	1,100	500AVQC330M0608
	68	0810	34	0.1	30	2,700	500AVQC680M0810
	120	1010	60	0.1	25	2,900	500AVQC121M1010
	180	1012	90	0.1	17	3,200	500AVQC181M1012
63 (78.8)	22	0608	13.9	0.08	80	900	630AVQC220M0608
	47	0810	29.6	0.08	32	2,400	630AVQC470M0810
	56	1010	35.3	0.08	30	2,800	630AVQC560M1010
	82	1010	51.7	0.08	30	2,800	630AVQC820M1010
	100	1010	63	0.08	30	2,800	630AVQC101M1010
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