

AVMA Series

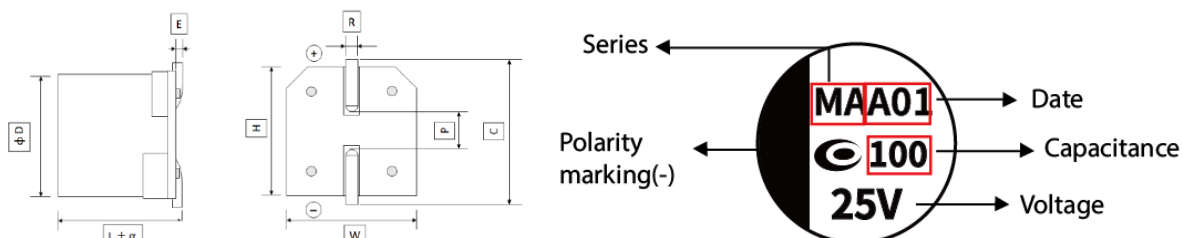
- Standard SMD type
- High reliability and high voltage are realized by hybrid electrolyte
- For high temperature and high reliability applications
- Rated Voltage:16~80V
- Endurance 10000 hours at 105°C
- RoHS Compliant



Specification

Category Temperature Range	-55~+105°C	Rated Voltage Range	16 to 80Vdc						
Rated Capacitance Range	22 to 470 (μF)	Capacitance Tolerance	±20% (M)						
Surge Voltage	Rated voltage X 1.15	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	105°C, 10000 hours, 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)	60°C, 90% RH, 1000 hours, rated 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							
Shelf Life	After storage for 1,000 hours at 105±2°C with no voltage applied and then being stabilized at 20°C, capacitors shall meet the limits specified in Endurance. (With voltage treatment)								
	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							

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±0.3 (mm)
0608	6.3	7.7	±0.3	0.00~0.20	6.6	6.6	7.3	0.5~0.8	2.1
0810	8.0	9.7	±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	0.00~0.20	10.3	10.3	11.0	0.8~1.1	4.6
1012	10.0	12.3	±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°C, 100kHz)	Rated Ripple Current (mA rms/ 105°C /100kHz)	Part No.
16 (18.4)	470	0810	75.2	0.16	26	2,400	160AVMA471M0810
	100	0608	25	0.14	30	2,000	250AVMA101M0608
25 (28.8)	220	0810	55	0.14	27	2,300	250AVMA221M0810
	330	1010	82.5	0.14	20	2,500	250AVMA331M1010
	390	1010	97.5	0.14	20	2,500	250AVMA391M1010
	470	1010	117.5	0.14	20	2,500	250AVMA471M1010
35 (40.3)	47	0608	16.5	0.12	35	2,000	350AVMA470M0608
	68	0608	23.8	0.12	35	2,000	350AVMA680M0608
	100	0810	35	0.12	30	1,800	350AVMA101M0810
	150	0810	52.5	0.12	27	2,300	350AVMA151M0810
	220	1012	77	0.12	17	3,000	350AVMA221M1012
	270	1010	94.5	0.12	20	2,500	350AVMA271M1010
	330	1010	115.5	0.12	20	2,500	350AVMA331M1010
50 (57.5)	33	0608	16.5	0.1	40	1,600	500AVMA330M0608
	33	0810	16.5	0.1	35	1,700	500AVMA330M0810
	47	0810	23.5	0.1	30	1,800	500AVMA470M0810
	68	0810	34	0.1	30	1,800	500AVMA680M0810
	100	1010	50	0.1	28	2,000	500AVMA101M1010
	120	1010	60	0.1	28	2,000	500AVMA121M1010
	150	1012	75	0.1	25	2,000	500AVMA151M1012
	180	1012	90	0.1	25	2,000	500AVMA181M1012
63 (72.5)	22	0608	13.9	0.08	80	1,500	630AVMA220M0608
	33	0810	20.8	0.08	40	1,700	630AVMA330M0810
	47	0810	29.6	0.08	40	1,700	630AVMA470M0810
	47	1010	29.6	0.08	30	2,100	630AVMA470M1010
	56	1010	35.3	0.08	30	1,800	630AVMA560M1010
	68	1010	42.8	0.08	30	1,800	630AVMA680M1010
	82	1010	51.7	0.08	30	1,800	630AVMA820M1010
	100	1010	63	0.08	30	2,400	630AVMA101M1010
	100	1012	63	0.08	22	2,100	630AVMA101M1012
80 (92)	22	0810	17.6	0.08	45	1,550	800AVMA220M0810
	33	1010	26.4	0.08	36	1,700	800AVMA330M1010
	47	1010	37.6	0.08	36	1,700	800AVMA470M1010

Frequency correction factor of allowable ripple current				
Frequency	120Hz ≤ f < 1kHz	1kHz ≤ f < 10kHz	10kHz ≤ f < 100kHz	100kHz ≤ f ≤ 500kHz
Coefficient	0.05	0.3	0.7	1

AP-CON HYBRID ALUMINUM ELECTROLYTIC CAPACITOR



PRODUCT IDENTIFICATION

<u>250</u>	<u>AVMA</u>	<u>101</u>	<u>M</u>	<u>0608</u>
Rated Voltage	Product	Capacitance	Cap Tolerance (%)	Size code (øDxL)
250: 25V	Series	101: 100μF	M: ±20%	0608: 6.3x8.0mm