

AVMC Series

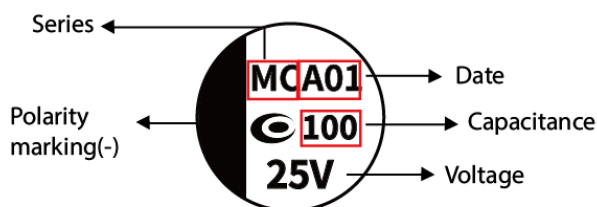
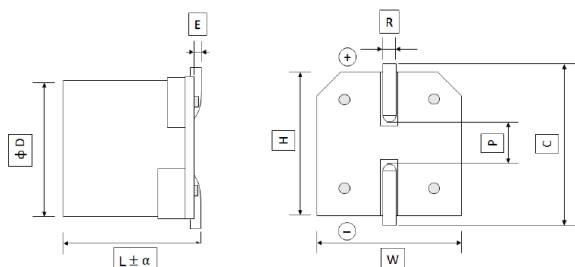
- Standard SMD type
- High reliability and high voltage are realized by hybrid electrolyte
- Rated Voltage:16~80V
- Endurance 4000 hours at 125°C
- For high temperature and high reliability applications
- RoHS Compliant



Specification

Category	Temperature Range	-55~+125°C	Rated Voltage Range	16 to 80Vdc						
Rated Capacitance Range	22 to 680 (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	125°C, 4000 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 to 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 125±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	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±0.3 (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

AVMC Series

Standard Ratings

WV/Vdc (SV)	Cap (μ F)	Size Code	Leakage Current (μ A)	$\tan\delta$	ESR ($m\Omega_{\max}/$ 20°C, 100kHz)	Rated Ripple Current (mA _{rms} / 125°C /100kHz)	Part No.
16 (18.4)	270	0810	43.2	0.16	22	1,700	160AVMC271M0810
	470	0810	75.2	0.16	20	2,000	160AVMC471M0810
25 (28.8)	100	0606	25	0.14	50	1,300	250AVMC101M0606
	100	0608	25	0.14	30	1,400	250AVMC101M0608
	150	0608	37.5	0.14	30	1,800	250AVMC151M0608
	220	0810	55	0.14	27	1,600	250AVMC221M0810
	270	0810	67.5	0.14	27	1,600	250AVMC271M0810
	330	1010	82.5	0.14	20	2,000	250AVMC331M1010
	470	1010	117.5	0.14	20	2,800	250AVMC471M1010
	560	1010	140	0.14	20	2,800	250AVMC561M1010
35 (40.3)	47	0606	16.5	0.12	60	900	350AVMC470M0606
	68	0608	23.8	0.12	35	1,400	350AVMC680M0608
	150	0810	52.5	0.12	27	1,600	350AVMC151M0810
	180	0810	63	0.12	27	1,600	350AVMC181M0810
	220	0812	77	0.12	19	2,000	350AVMC221M0812
	270	1010	94.5	0.12	20	2,000	350AVMC271M1010
	330	1010	115.5	0.12	20	2,000	350AVMC331M1010
	330	1012	115.5	0.12	17	2,300	350AVMC331M1012
	390	1012	136.5	0.12	17	2,800	350AVMC391M1012
	470	1016	164.5	0.12	11	4,000	350AVMC471M1016
50 (57.5)	680	1016	238	0.12	11	4,000	350AVMC681M1016
	33	0608	16.5	0.10	40	1,100	500AVMC330M0608
	68	0810	34	0.10	30	1,250	500AVMC680M0810
	100	1010	50	0.10	28	1,600	500AVMC101M1010
	120	1010	60	0.10	28	1,600	500AVMC121M1010
63 (72.5)	180	1012	90	0.10	25	2,000	500AVMC181M1012
	22	0608	13.9	0.08	80	900	630AVMC220M0608
	33	0810	20.8	0.08	40	1,100	630AVMC330M0810
	47	0810	29.6	0.08	32	2,400	630AVMC470M0810
	56	1010	35.3	0.08	30	1,400	630AVMC560M1010
	68	1010	42.8	0.08	30	1,400	630AVMC680M1010
	82	1010	51.7	0.08	30	1,400	630AVMC820M1010
	100	1010	63	0.08	30	2,800	630AVMC101M1010
80 (92)	180	1016	113.4	0.08	15	3,500	630AVMC181M1016
	22	0810	17.6	0.08	45	1,050	800AVMC220M0810
	27	0810	21.6	0.08	45	1,050	800AVMC270M0810
	33	1010	26.4	0.08	36	1,360	800AVMC330M1010
	47	1010	37.6	0.08	36	1,360	800AVMC470M1010
	56	1010	44.8	0.08	36	1,360	800AVMC560M1010
	68	1012	54.4	0.08	28	2,100	800AVMC680M1012

Frequency correction factor of allowable ripple current

Frequency	$120\text{Hz} \leq f < 1\text{kHz}$	$1\text{kHz} \leq f < 10\text{kHz}$	$10\text{kHz} \leq f < 100\text{kHz}$	$100\text{kHz} \leq f \leq 500\text{kHz}$
Coefficient	0.05	0.3	0.7	1

PRODUCT IDENTIFICATION

<u>250</u>	<u>AVMC</u>	<u>101</u>	<u>M</u>	<u>0608</u>
Rated Voltage	Product	Capacitance	Cap Tolerance (%)	Size code (ϕ DxL)
250: 25V	Series	101: 100 μ F	M: $\pm 20\%$	0608: 6.3x8.0mm