SURFACE MOUNT ALUMINUM ELECTROLYTIC CAPACITORS

MV Series ● **85℃ 1,000~2,000Hrs assured.**

- Vertical SMD Type.
- General.
- **RoHS compliant.**
- **Halogen-free capacitors are also available.**

Solvent-proof

WV ≤ 63V_{DC}

SPECIFICATIONS

Item	Characteristics
Rated Voltage Range	4 ~ 100V_{DC}
Operating Temperature Range	- 40 + 85℃
Capacitance tolerance	±20% (M) (at 20℃, 120Hz)
Leakage current	I=0.01CV (μA) or 3μA,whichever is greater. Where. I:Max. leakage current(μA) , C: Nominal capacitance(μF) V:Rated vlotage (V_{DC}) (at 20℃, 2 minutes)
Dissipation factor(Tan δ)	Refer to Table 1.
Temperature characteristics (Max.Impedance ratio)	Rated voltage(V_{DC}) 4 / 6.3 / 10 / 16 / 25 / 35 ~ 50 / 63 ~ 100 Z(-25℃)/Z(20℃) 7 / 4 / 3 / 2 / 2 / 2 / 3 Z(-40℃)/Z(20℃) 15 / 10 / 8 / 6 / 4 / 3 / 4 (at 120Hz)
Load life	The following specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage is applied for 2,000 hours at 85℃. (Where, 1,000hours for Ø3) Capacitance change ≤±20% of the initial vaule Tan δ ≤200% of the initial specified value Leakage current ≤The initial specified value
Shelf life	The following specifications shall be satisfied when the capacitors are restored to 20℃ after exposing them for 1,000 hours at 85℃ without voltage applied. The rated voltage shall be applied to the capacitors for a minimum of 30 minutes, at least 24 hours and not more than 48 hours before the measurement. Capacitance change ≤±15% of the initial vaule Tan δ ≤150% of the initial specified value Leakage current ≤The initial specified value
Others	Satisfied characteristics W of KS C 6421

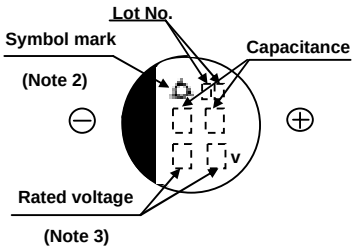
Table 1. RATINGS OF MV Series

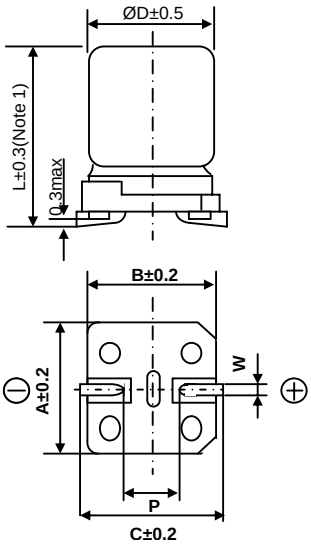
V_{DC} / Item μF	4(0G)		6.3(0J)		10(1A)		16(1C)		25(1E)		35(1V)		50(1H)		63(1J)		100(2A)	
	CASE CODE	Tan δ	CASE CODE	Tan δ	CASE CODE	Tan δ	CASE CODE	Tan δ	CASE CODE	Tan δ	CASE CODE	Tan δ	CASE CODE	Tan δ	CASE CODE	Tan δ	CASE CODE	Tan δ
0.1													B55 D55	0.12 0.11	D55	0.12		
0.15													B55 D55	0.12 0.11	D55	0.12		
0.22													B55 D55	0.12 0.11	D55	0.12		
0.33													B55 D55	0.12 0.11	D55	0.12		
0.47													B55 D55	0.12 0.11	D55	0.12		
0.68													B55 D55	0.12 0.11	D55	0.12		
1													B55 D55	0.13 0.11	D55	0.12		
1.5													B55 D55	0.13 0.11	D55	0.12		
2.2											B55 D55	0.15	B55 D55	0.13 0.11	D55	0.12		
3.3											B55 D55	0.14	D55	0.11	E55	0.12		
4.7									B55 D55	0.16	D55	0.13	E55	0.11	E55	0.12		
6.8							B55 D55	0.24 0.22	D55	0.15	E55	0.13	F55	0.11	F55	0.12		
10					B55 D55	0.28	B55 D55	0.24 0.22	E55	0.15	E55	0.13	F55	0.11	F60	0.12		
15					D55	0.26	E55	0.20	F55	0.15	F55	0.13	F60	0.12	F60	0.12		
22	B55 D55	0.46	B55 D55	0.41 0.32	E55	0.28	E55	0.20	F55	0.15	F55	0.13	F60	0.12	F80	0.12	H10	0.12
33	D55	0.46	E55	0.27	E55	0.26	F55	0.21	F55	0.15	F60	0.14	H63 F80	0.12	H10	0.12	J10	0.12
47	D55	0.60	E55	0.35	F55	0.23	F55	0.21	F60	0.16	H63 F80	0.14	H10	0.12	H10	0.12		
68	E55	0.42	F55	0.38	F55	0.29	F60	0.23	H63 F80	0.16	H10	0.14	J10	0.12	J10	0.12		
100	E55	0.62	F55	0.40	F60	0.23	F60 F63	0.26	H63 F80	0.16	H10	0.14	J10	0.12				
220	F55	0.72	F60 H63	0.40	H63 F80	0.30	H10	0.26	J10	0.16	J10	0.14						
330			H63 H80	0.40	H10	0.30	H10	0.26										
470			H10	0.40	J10	0.30	J10	0.26										
1,000			J10	0.40														

DIMENSIONS OF MV Series (Type:VC)

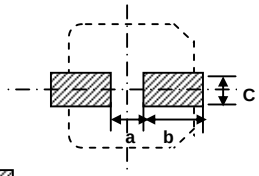
Unit(㎜)

DIMENSIONS





Recommended solder land on PC board



: Solder pad on PC board

Note1 : L±0.5 for 8×6.3(H63), 8×10(H10), 10×10(J10)
Note2 : 3×5.2(B55), 4×5.3(D55) is excluded symbol mark.
Note3 : 6.3WV is marked by 6V.

Case code	ØD	L	A	B	C	W	P	a	b	c
B55	3	5.2	3.3	3.3	3.7	0.45 ~ 0.75	0.8	0.8	2.2	1.6
D55	4	5.2	4.3	4.3	5.1	0.5 ~ 0.8	1.0	1.0	2.6	1.6
E55	5	5.2	5.3	5.3	5.9	0.5 ~ 0.8	1.4	1.4	3.0	1.6
F55	6.3	5.2	6.6	6.6	7.2	0.5 ~ 0.8	1.9	1.9	3.5	1.6
F60	6.3	5.7	6.6	6.6	7.2	0.5 ~ 0.8	1.9	1.9	3.5	1.6
F80	6.3	7.7	6.6	6.6	7.2	0.5 ~ 0.8	1.9	1.9	3.5	1.6
H63	8	6.3	8.3	8.3	9.0	0.5 ~ 0.8	2.3	2.3	4.5	1.6
H10	8	10	8.3	8.3	9.0	0.7 ~ 1.1	3.1	3.1	4.2	2.2
J10	10	10	10.3	10.3	11.0	0.7 ~ 1.1	4.5	4.5	4.4	2.2

RATINGS OF MV Series

μF \ V_{DC}	4(0G)		6.3(0J)		10(1A)		16(1C)		25(1E)		35(1V)		50(1H)		63(1J)		100(2A)	
0.1													B55 D55 1.1	1.3	D55	1.3		
0.15													B55 D55 2.0	2.0	D55	2.5		
0.22													B55 D55 2.0	2.9	D55	3.0		
0.33													B55 D55 3.0	3.5	D55	4.0		
0.47													B55 D55 3.8	4.2	D55	5.0		
0.68													B55 D55 4.6	5.1	D55	6.0		
1													B55 D55 5.6	6.2	D55	8.0		
1.5													B55 D55 6.9	7.5	D55	9.5		
2.2											B55 D55	7.7	B55 D55 8.3	10	D55	12		
3.3											B55 D55	9.4	D55	14	E55	17		
4.7									B55 D55	10.5	D55	15	E55	19	E55	20		
6.8							B55 D55	11.6	D55	16	E55	20	F55	24	F55	25		
10					B55 D55	12.8	B55 D55	14 17	E55	25	E55	25	F55	29	F60	32		
15					D55	20	E55	26	F55	33	F55	33	F60	32	F60	40		
22	B55 D55	14	B55 D55	23	E55	32	E55	32	F55	40	F55	40	F60	45	F80	60	H10	90
33	D55	23	E55	35	E55	35	F55	45	F55	45	F60	55	H63 F80	95	H10	110	J10	120
47	D55	27	E55	38	F55	50	F55	50	F60	65	H63 F80	105	H10	140	H10	130		
68	E55	38	F55	54	F55	54	F60	48	H63 F80	115	H10	157	J10	170	J10	170		
100	E55	46	F55	60	F60	70	F60 F63	80 175	H63 F80	145	H10	175	J10	195				
220	F55	74	F60 H63	80 175	H63 F80	175	H10	215	J10	265	J10	265						
330			H63 H80	190	H10	270	H10	270										
470			H10	265	J10	330	J10	330										
1,000			J10	400														

Rated Ripple Current(mArms/85℃, 120Hz)
Case Code

※Height 4.6㎜ max. is available upon request.
Please check with us about individual size and dimensions.