

MV Series

● 85°C 1,000~ 2,000Hrs assured.

- Vertical SMD type.
- General.
- EMV Series : Ecological capacitors with the same characteristics as MV

Solvent-
proof



SPECIFICATIONS

Item	Characteristics																								
Rated Voltage Range	4 ~ 100V _{DC}																								
Operating Temperature Range	-40 ~ +85°C																								
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)																								
Leakage Current	I = 0.01CV or 3μA, whichever is greater Where, I : Leakage current (μA), C : Nominal capacitance(μF), V: Rated voltage(V _{DC}) (at 20°C, 2 minutes)																								
Dissipation Factor(Tanδ)	Refer to table 1 (at 20°C, 120Hz)																								
Temperature Characteristics (Max. Impedance ratio)	<table border="1"> <thead> <tr> <th>Rated Voltage(V_{DC})</th> <th>4</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35~50</th> <th>63~100</th> </tr> </thead> <tbody> <tr> <td>Z (-25°C) / Z (20°C)</td> <td>7</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>3</td> </tr> <tr> <td>Z (-40°C) / Z (20°C)</td> <td>15</td> <td>10</td> <td>8</td> <td>6</td> <td>4</td> <td>3</td> <td>4</td> </tr> </tbody> </table>	Rated Voltage(V _{DC})	4	6.3	10	16	25	35~50	63~100	Z (-25°C) / Z (20°C)	7	4	3	2	2	2	3	Z (-40°C) / Z (20°C)	15	10	8	6	4	3	4
	Rated Voltage(V _{DC})	4	6.3	10	16	25	35~50	63~100																	
	Z (-25°C) / Z (20°C)	7	4	3	2	2	2	3																	
Z (-40°C) / Z (20°C)	15	10	8	6	4	3	4																		
	(at 120Hz)																								
Load Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage applied for 2,000 hours at 85°C (Where, 1,000 hours for 3 Ø) Capacitance change ≤ ±20% of the initial value Tanδ ≤ 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°C after exposing them for 500 hours at 85°C 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 measurements. Capacitance change ≤ ±15% of the initial value (Where, ±20 % for 3 Ø) Tanδ ≤ 150% of the initial specified value (Where, 200 % for 3 Ø) Leakage current ≤ The initial specified value																								
Others	Satisfied characteristics W of KS C 6421																								

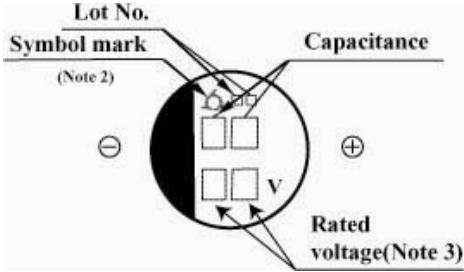
Item μF	V_{DC}	35(1V)		50(1H)				63(1J)		100(2A)		
		Case code	TAN δ	Case code	TAN δ		Case code	TAN δ	Case code	TAN δ		
0.1				B55	D55	0.12	0.11	D55	0.12			
0.15				B55	D55	0.12	0.11	D55	0.12			
0.22				B55	D55	0.13	0.11	D55	0.12			
0.33				B55	D55	0.12	0.11	D55	0.12			
0.47				B55	D55	0.12	0.11	D55	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		D55		0.13	E55		0.11		E55	0.12		
6.8		E55		0.13	F55		0.11		F55	0.12		
10		E55		0.13	F55		0.11		F55	0.12		
15		F55		0.13	F60		0.12		F60	0.12		
22		F55		0.13	F60		0.12		F80	0.12	H10	0.12
33		F60		0.14	H63	F80	0.12		H10	0.12	J10	0.12
47		H63	F80	0.14	H10		0.12		H10	0.12		
68		H10		0.14	J10		0.12		J10	0.12		
100		H10		0.14	J10		0.12					
220		J10		0.14								
330												
470												
1,000												

DIMENSIONS OF MV Series (Type : VC)

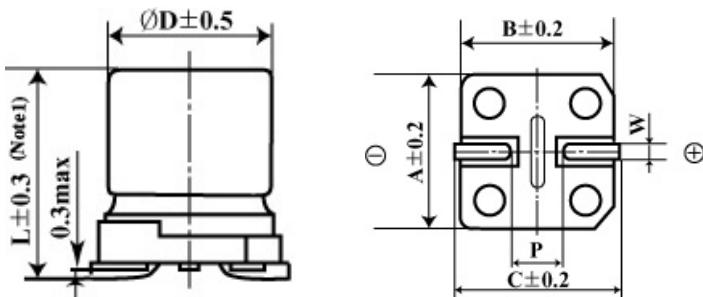
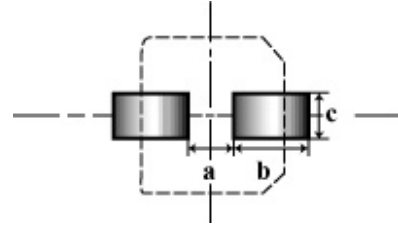
Unit(mm)

DIMENSIONS

Marking



Recommended solder land on PC



Solder land on PC board

Note 1 : $L + 0.5$ for 8 x 6.3 (H63), 8 x 10 (H10), 10 x 10 (J10).

Note 2 : 4 + 5.2 (B55), 5 x 5.2 (D55) is excluded symbol mark.

Note 3 : 6.3WV is marked by 6V.

Note 4 : Case Color ; Clairity Green

Case code	$\varnothing D$	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

ITem μF	35(1V)		50(1H)				63(1J)		100(2A)	
	Case code	Ripple Current	Case code	Ripple Current	Case code	Ripple Current	Case code	Ripple Current	Case code	Ripple Current
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	D55		15	E55		19		E55	20	
6.8	E55		20	F55		24		F55	25	
10	E55		25	F55		29		F60	32	
15	F55		33	F60		32		F60	40	
22	F55		40	F60		45		F80	60	H10 90
33	F60		55	H63	F80	95		H10	110	J10 120
47	H63	F80	105	H10		140		H10	130	
68	H10		157	J10		170		J10	170	
100	H10		175	J10		195				
220	J10		265							
330										
470										
1,000										

* Height 4.6mm Max. is available upon request.

Please check with us about individual size and dimensions.