

MVK Series

● 105℃ 1,000~ 2,000Hrs assured

- Vertical SMD type
- Wide Temperature range
- For CD/DVD-ROM, Navigation, LCD MT/TV
- Ecological capacitors are also available.

Solvent-proof



A diagram consisting of a large, horizontally-oriented oval. Inside the oval, the letters "MV" are centered in a serif font.



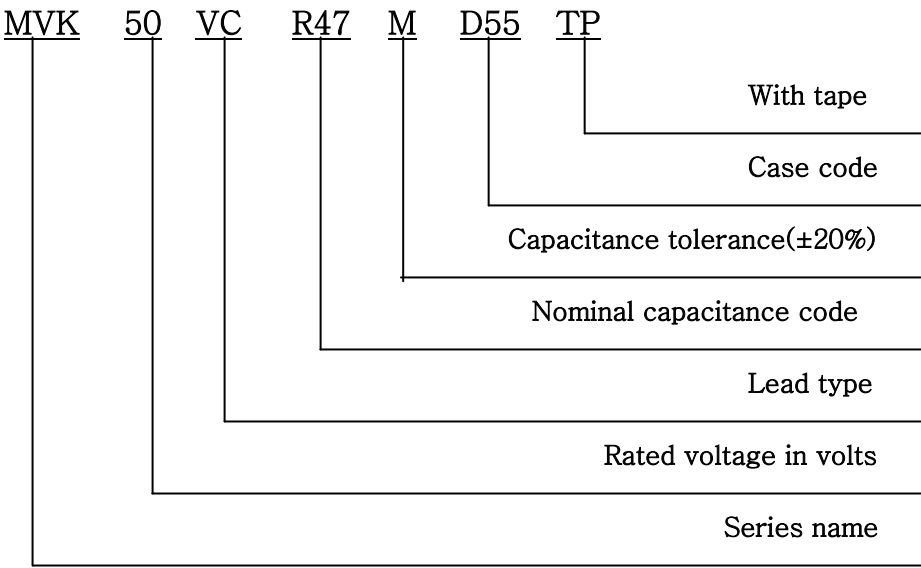
Wide Temp

SPECIFICATIONS

Item	Characteristics								
Rated Voltage Range	6.3 ~ 450V _{DC}								
Operating Temperature Range	-40 ~ +105℃								
Capacitance Tolerance	±20% (M) (at 20℃, 120Hz)								
Leakage Current	Rated Voltage(V _{DC})	6.3~100						160~450	
	Max. Leakage current(μA)	0.01CV (μA) or 3μA, whichever is greater. (at 20 ℃, 2 minutes)						0.04CV + 100(μA) (at 20 ℃, 1 minutes)	
	Where, C: Nominal capacitor(μF), V: Rated voltage (V _{DC})								
Dissipation Factor Tanδ (Max.)	Rated Voltage(V _{DC})	6.3	10	16	25	35	50~100	160~250	400~450
	Ø 4~ Ø 6.3	0.30	0.24	0.20	0.16	0.14	0.12	-	-
	Ø 8~ Ø 12.5	0.40	0.30	0.26	0.16	0.14	0.12	0.15	0.20
(at 20℃, at 120Hz)									
Temperature Characteristics (Max. Impedance ratio)	Rated Voltage(V _{DC})	6.3	10	16	25	35	500~100	160~250	400~450
	Z(-25℃)/Z(20℃)	4	3	2	2	2	3	3	6
	Z(-40℃)/Z(20℃)	10	8	6	4	3	4	6	10
(at 120Hz)									
Load Life	The following specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage applied with the following conditions.								
	Ø 4~ Ø 6.3 : 105℃, 1,000hours. Ø 8 & Ø 12.5 : 105℃, 2,000hours								
	Capacitance change								
	Ø 4~ Ø 6.3 ≤± 30% of the initial value								
	Ø 8~ Ø 12.5 ≤± 20% of the initial value								
Tanδ	Ø 4~ Ø 6.3 ≤ 300% of the initial specified value								
	Ø 8~ Ø 10 ≤ 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 the specified time at 105℃ 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. Ø 4~ Ø 6.3 : 105℃, 500 hours. Ø 8 & Ø 12.5 : 105℃, 1,000 hours Capacitance change Ø 4~ Ø 6.3 ≤ ± 25% of the initial value Ø 8~ Ø 12.5 ≤ ± 20% of the initial value Tanδ ≤ 200% of the initial specified value Leakage current ≤ The initial specified value
	Others
	Satisfied characteristics W of KS C 6421

PART NUMBERING SYSTEM



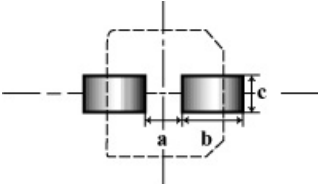
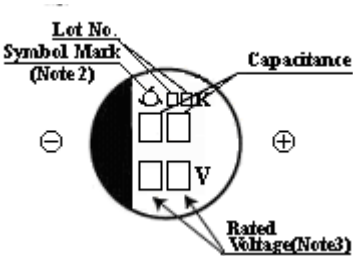
Capacitance	Code
0.1 μF	R1
0.47 μF	R47
1.0 μF	1
4.7 μF	4R7
10 μF	10
100 μF	100

DIMENSIONS OF MVK Series (Type :VC)

DIMENSIONS

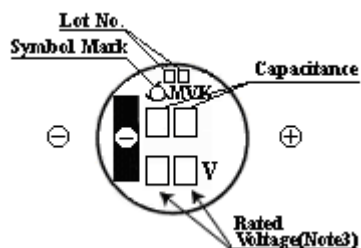
Recommended solder land on PC board

Marking

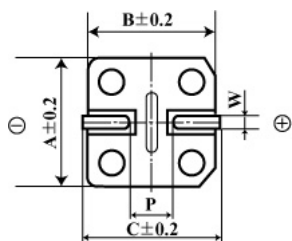
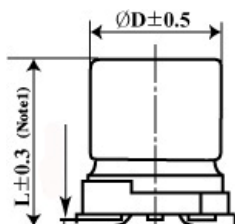


Sold land on PC board

< B55 ~ J10>



< K14 >



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

Note 2 : 4 x 5.2(D55), 5 x 5.2(E55) is excluded symbol mark

Note 3 : 6.3WV is marked by 6V.

Case code	Ø D	L	A	B	C	W	P	a	b	c
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
H63	8	6.3	8.3	8.3	9.0	0.5-0.8	2.3	2.3	4.5	1.6
H10	8	10.0	8.3	8.3	9.0	0.7-1.1	3.1	3.1	4.2	2.2
J10	10	10.0	10.3	10.3	11.0	0.7-1.1	4.5	4.5	4.4	2.2
K14	12.5	13.5	13.0	13.0	13.7	1.0-1.3	4.5	4.2	4.0	2.5

RATINGS OF MVK Series

V_{DC} μF	6.3(0J)		10(1A)		16(1C)	
0.1						
0.22						
0.33						
0.47						
1						
2.2						
3.3						
4.7						
10					D55	16

22	D55		21	E55		30	E55		30	
33	E55		36	E55		34	F55		45	
47	E55		36	F55		48	F55		48	
100	F55	F60	56	F60	H63	90	F60	H10	110	180
220	H63		150	H63		150	H10		275	
330	H10		290	135	J10	450	J10		450	
470	J10		460	J10		460	J10		460	
1,000	J10		520	J10		540	K14		550	
1,500	J10		550	K14		620				
2,200	K14		680							

V_{DC} μF	25(1E)				35(1V)		50(1H)		
0.1							D55	1.3	
0.22							D55	2.6	
0.33							D55	3.2	
0.47							D55	3.8	
1							D55	5.6	
2.2							D55	10	
3.3							D55	14	
4.7					D55	15	E55	19	
10	E55		25		E55	25	F55	29	
22	F55		40		F55	40	H63	70	
33	F55		45		H63	80	H10	140	
47	F60	H63	52	80	H63	140	H10	170	
100	H63	H10	135	180	H10	250	J10	310	
220	J10		375		J10	375	K14	420	
330	J10		450		K14	480	K14	500	
470	J10		460		K14	520	↑	↑	
1,000	K14		550						
1,500									



