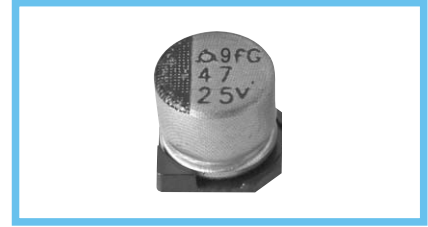


MVG Series

• 85°C 1,000~2,000Hrs assured.

Solvent-proof

WV ≤ 63V_{DC}



- Vertical SMD Type.
- Downsized of MV Series.
- For CD/DVD-ROM, Navigation, LCD MT/TV
- RoHS compliant.
- Halogen-free capacitors are also available.

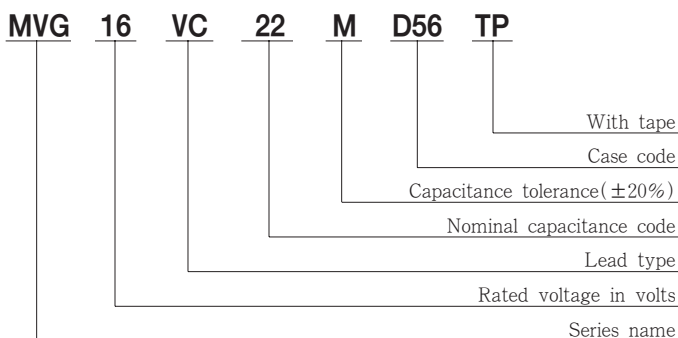


Downsized

SPECIFICATIONS

Item	Characteristics			
Rated Voltage Range	4 ~ 450 V _{DC}			
Operating Temperature Range	-40 ~ +85°C			
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)			
Leakage Current	Rated Voltage(V _{DC})	4~100 160~450		
	Max. leakage current(μA)	0.01CV (μA) or 3μA, whichever is greater. 0.04CV + 100(μA) (at 20°C, 2 minutes) (at 20°C, 1 minute)		
Where, C:Nominal capacitance(μF), V:Rated voltage(V _{DC})				
Dissipation Factor Tan δ(Max.)	Rated Voltage(V _{DC})	4 6.3 10 16 25 35~50 63~100 160~250 400~450		
	Tan δ(Max.)	0.42 0.40 0.30 0.20 0.15 0.12 0.20 0.25		
(at 20°C, 120Hz)				
Temperature Characteristics (Max. Impedance ratio)	Rated Voltage(V _{DC})	4 6.3 10 16 25 35~50 63~100 160~250 400~450		
	Z(-25°C)/Z(+20°C)	7 4 3 2 2 2 3 3 6		
	Z(-40°C)/Z(+20°C)	15 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°C after the rated voltage is applied for 2,000 hours at 85°C. (where, 1,000 hours for ø 3)			
	Rated Voltage(V _{DC})	4 ~ 6.3	10 ~ 100	
	Capacitance change	≤ ±30% of the initial value	≤ ±25% of the initial value	≤ ±20% of the initial value
	TANδ	≤ 300% of the initial specified value		≤ 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 1,000 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. (where, 500 hours for ø 3)			
	Rated Voltage(V _{DC})	4 ~ 6.3	10 ~ 100	160~450
	Capacitance change	≤ ±30% of the initial value	≤ ±25% of the initial value	≤ ±20% of the initial value
	TANδ	≤ 300% of the initial specified value		≤ 200% of the initial specified value
	Leakage Current	≤ The initial specified value		
	Others			
Satisfied characteristics KS C IEC 60384-4				

PART NUMBERING SYSTEM



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

DIMENSIONS OF MVG Series(Type:VC)

Unit(mm)

DIMENSIONS

● Vibration Resistance

<Size code: B55~M22> <Size code: L17~M22>

■ : Dummy terminals

Recommended Solder land on PC board

■ : Solder land on PC board

MARKING

<B55 ~ J10> <K14 ~ M22>

Note 1 : L±0.5 for 8×6.3(H63) ~ 18×21.5(M22)
 Note 2 : 3×5.2(B55), 4×5.3(D56), 5×5.3(E56) is excluded symbol mark
 Note 3 : 6.3WV is marked by 6V

Case code	∅D	L	A	B	C	W	P	a	b	c	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			
D56	4	5.3	4.3	4.3	5.1	0.5-0.8	1.0	1.0	2.6	1.6			
E56	5	5.3	5.3	5.3	5.9	0.5-0.8	1.4	1.4	3.0	1.6			
F56	6.3	5.3	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			
K14	12.5	13.5	13.0	13.0	13.7	1.0-1.3	4.2	4.0	5.7	2.5			
L17	16	16.5	17.0	17.0	18.0	1.0-1.3	6.5	6.0	6.9	2.5	4.7	7.8	9.6
L22	16	21.5	17.0	17.0	18.0	1.0-1.3	6.5	6.0	6.9	2.5			
M17	18	16.5	19.0	19.0	20.0	1.0-1.3	6.5	6.0	7.9	2.5	4.7	8.8	9.6
M22	18	21.5	19.0	19.0	20.0	1.0-1.3	6.5	6.0	7.9	2.5			

● Vibration Resistance

RATING OF MVG Series

Vdc / μF	4	6.3	10	16	25	35	50	63	100											
0.1							B55 D56	1.1 1.3	D56 1.3											
0.22							B55 D56	2.0 2.9	D56 3.0											
0.33							B55 D56	3.0 3.5	D56 4.0											
0.47							B55 D56	3.8 4.2	D56 5.0											
1							B55 D56	5.6 6.2	D56 8.0											
2.2						B55 D56	7.7	B55 D56	8.3 10	D56 12										
3.3						B55 D56	9.4	D56	14	E56 17										
4.7					B55 D56	10.5	D56	15	D56	19	E56 20									
10			B55 D56	12.8	B55 D56	14 17	D56	20	D56	25	E56	29	F60	32						
22	B55 D56	14	B55 D56	23	D56	27	D56	27	E56	28	F56	33	F60	40	F80	60	H10	90		
33	D56	23	D56	30	D56	30	E56	40	E56	40	F56	40	F56	40	F80	55	H10	110	J10	120
47	D56	27	D56	33	E56	45	E56	45	F56	60	F60	55	H63	140	H10	130	J10	144		
68	E56	38	E56	49	F56	54	F56	78	F60	90	H63	157	H10	170	J10	170	K14	380		
100	E56	46	E56	55	F56	65	F60	85	F80/H63	145	H10	175	H10	190	K14	380	K14	440		
220	F56	74	F60	75	F80/H63	130	F80	130	H10	260	H10	260	J10	320	K14	580	M17	800		
330			F80/H63	135	H10	270	H10	270	H10	300	J10	360	K14	600	L17	850	M17	1000		
470			H10	280	H10	280	H10	280	J10	400	K14	600	L17	850	M17	1000				
1,000			J10	430	J10	430	K14	710	K14	820	L17	1100	L22	1300						
1,500			J10	480	K14	850														
2,200			K14	890	K14	960	L17	1150	M17	1400	M22	1700								
3,300			L17	1200	L17	1300	M17	1450	M22	1800										
4,700			L17	1400	M17	1600	M22	1750												
6,800			M17	1700	M22	1850														
10,000			M22	2000																

Vdc / μF	160	200	250	400	450
4.7				K14 120	K14 120
10	J10 55	K14 150	K14 150	L17 140	L17 140
22	K14 240	K14 240	L17 300	M17 280	L22 280
33	K14 260	L17 350	L17 340	M22 350	M22 350
47	L17 400	L17 420	M17 420		
68	L17 500	M17 510	M22 490		
100	M17 590	M22 590			

Rated Ripple Current(mArms/85°C, 120Hz)
 Case code

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