

# Alchip™ - MVK Series

- Endurance : 1,000 to 2,000 hours at 105°C
- Suitable to fit for downsized equipment
- Solvent resistant type
- RoHS Compliant
- MVK series will be discontinued, strongly recommended MVE series

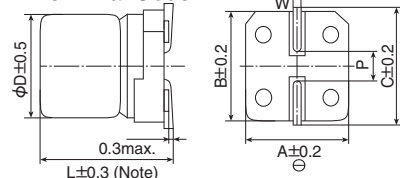


## ◆ SPECIFICATIONS

Items	Characteristics							
Category Temperature Range	-40 to +105°C							
Rated Voltage Range	6.3 to 50V <sub>dc</sub>							
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)							
Leakage Current	I=0.01CV or 3μA, whichever is greater. Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20°C after 2 minutes)							
Dissipation Factor (tanδ)	Rated voltage (V <sub>dc</sub> )	6.3V	10V	16V	25V	35V	50V	(at 20°C, 120Hz)
	tanδ (Max.)	D55 to F55 H63 to JA0	0.30 0.40	0.24 0.30	0.20 0.26	0.16 0.16	0.14 0.14	
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (V <sub>dc</sub> )	6.3V	10V	16V	25V	35V	50V	(at 120Hz)
	Z(-25°C)/Z(+20°C)	4	3	2	2	2	2	
	Z(-40°C)/Z(+20°C)	10	8	6	4	3	3	
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for the specified period of time at 105°C.							
	Case code	D55 to F55			H63 to JA0			
	Time	1,000hours			2,000hours			
	Capacitance change	≤±30% of the initial value			≤±20% of the initial value			
	D.F. (tanδ)	≤300% of the initial specified value			≤200% of the initial specified value			
	Leakage current	≤The initial specified value			≤The initial specified value			
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for the specified time at 105°C without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to Item 4.1 of JIS C 5101-4.							
	Case code	D55 to F55			H63 to JA0			
	Time	500hours			1,000hours			
	Capacitance change	≤±25% of the initial value			≤±20% of the initial value			
	D.F. (tanδ)	≤200% of the initial specified value			≤200% of the initial specified value			
	Leakage current	≤The initial specified value			≤The initial specified value			

## ◆ DIMENSIONS [mm]

● Terminal Code : A



Note : L±0.5 for H63 to JA0

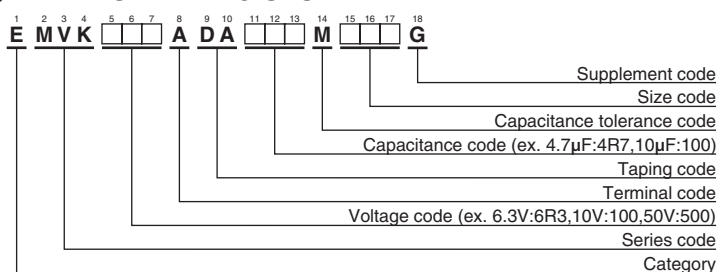
Size code	D	L	A	B	C	W	P
D55	4	5.2	4.3	4.3	5.1	0.5 to 0.8	1.0
E55	5	5.2	5.3	5.3	5.9	0.5 to 0.8	1.4
F55	6.3	5.2	6.6	6.6	7.2	0.5 to 0.8	1.9
H63	8	6.3	8.3	8.3	9.0	0.5 to 0.8	2.3
HA0	8	10.0	8.3	8.3	9.0	0.7 to 1.1	3.1
JA0	10	10.0	10.3	10.3	11.0	0.7 to 1.1	4.5

## ◆ MARKING

EX) 6.3V100μF



## ◆ PART NUMBERING SYSTEM



Specifications in this bulletin are subject to change without notice.

◆STANDARD RATINGS

WV (Vdc)	Cap (μF)	Case code	tanδ	Rated ripple current (mA <sub>rms</sub> /105°C,120Hz)	Part No.	WV (Vdc)	Cap (μF)	Case code	tanδ	Rated ripple current (mA <sub>rms</sub> /105°C,120Hz)	Part No.
6.3	22	D55	0.30	21	EMVK6R3ADA220MD55G	35	4.7	D55	0.14	15	EMVK350ADA4R7MD55G
	47	E55	0.30	36	EMVK6R3ADA470ME55G		10	E55	0.14	25	EMVK350ADA100ME55G
	100	F55	0.30	56	EMVK6R3ADA101MF55G		22	F55	0.14	40	EMVK350ADA220MF55G
	330	HA0	0.40	290	EMVK6R3ADA331MHA0G		33	H63	0.14	80	EMVK350ADA330MH63G
	1,000	JA0	0.40	410	EMVK6R3ADA102MJA0G		220	JA0	0.14	375	EMVK350ADA221MJA0G
10	33	E55	0.24	34	EMVK100ADA330ME55G	50	1.0	D55	0.12	5.6	EMVK500ADA1R0MD55G
	100	H63	0.30	90	EMVK100ADA101MH63G		2.2	D55	0.12	10	EMVK500ADA2R2MD55G
	220	HA0	0.30	180	EMVK100ADA221MHA0G		3.3	D55	0.12	14	EMVK500ADA3R3MD55G
16	10	D55	0.20	16	EMVK160ADA100MD55G		4.7	E55	0.12	19	EMVK500ADA4R7ME55G
	22	E55	0.20	30	EMVK160ADA220ME55G		10	F55	0.12	29	EMVK500ADA100MF55G
	47	F55	0.20	48	EMVK160ADA470MF55G		22	H63	0.12	70	EMVK500ADA220MH63G
	470	JA0	0.26	460	EMVK160ADA471MJA0G		33	HA0	0.12	140	EMVK500ADA330MHA0G
25	33	F55	0.16	45	EMVK250ADA330MF55G		47	HA0	0.12	170	EMVK500ADA470MHA0G
	47	H63	0.16	80	EMVK250ADA470MH63G		100	JA0	0.12	310	EMVK500ADA101MJA0G
	100	HA0	0.16	180	EMVK250ADA101MHA0G						
	330	JA0	0.16	450	EMVK250ADA331MJA0G						