

Alchip® **MVK-BP** Series

- Bi-polarized chip type for the circuit, of which polarity is frequently reversed
- Solvent-proof type (see PRECAUTIONS AND GUIDELINES)
- Pb-free design

**MVK-BP**

↑  
bi-polarized  
MVK

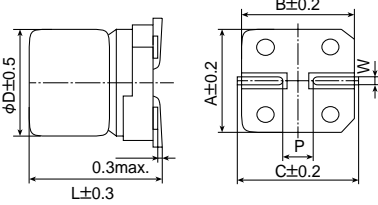


◆ **SPECIFICATIONS**

Items	Characteristics						
Category	-40 to +105°C						
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=0.05CV or 10μA, 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
	tanδ (Max.)	0.35	0.26	0.24	0.20	0.18	0.18
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (V <sub>dc</sub> )	6.3V	10V	16V	25V	35V	50V
	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 1000 hours at 105°C, however the polarization shall be reversed every 250 hours.						
	Capacitance change	≤±30% of the initial value					
	D.F. (tanδ)	≤300% 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 105°C without voltage applied.						
	Capacitance change	≤±25% of the initial value					
	D.F. (tanδ)	≤200% of the initial specified value					
	Leakage current	≤The initial specified value					

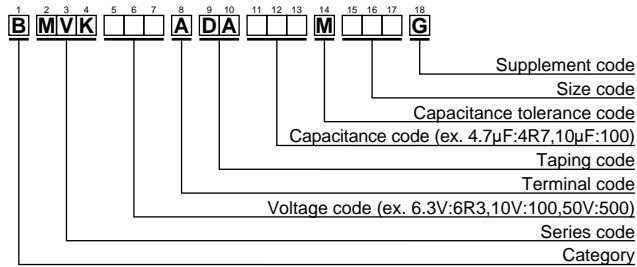
◆ **DIMENSIONS [mm]**

● Terminal Code : A



Size code	D	L	A	B	C	W	P
D60	4	5.7	4.3	4.3	5.1	0.5 to 0.8	1.0
E60	5	5.7	5.3	5.3	5.9	0.5 to 0.8	1.4
F60	6.3	5.7	6.6	6.6	7.2	0.5 to 0.8	1.9

◆ **PART NUMBERING SYSTEM**



Please refer to "A guide to global code (surface mount type)"

◆ **MARKING**

EX) 35V4.7μF



◆ **STANDARD RATINGS**

WV (V <sub>dc</sub> )	Cap (μF)	Size code	tanδ	Rated ripple current (mA <sub>RMS</sub> /105°C, 120Hz)	Part No.	WV (V <sub>dc</sub> )	Cap (μF)	Size code	tanδ	Rated ripple current (mA <sub>RMS</sub> /105°C, 120Hz)	Part No.	
6.3	10	D60	0.35	14	BMVK6R3ADA100MD60G	50	0.10	D60	0.18	1.3	BMVK500ADAR10MD60G	
	22	E60	0.35	25	BMVK6R3ADA220ME60G		0.15	D60	0.18	1.9	BMVK500ADAR15MD60G	
	47	F60	0.35	39	BMVK6R3ADA470MF60G		0.22	D60	0.18	2.3	BMVK500ADAR22MD60G	
10	6.8	D60	0.26	13	BMVK100ADA6R8MD60G		0.33	D60	0.18	2.8	BMVK500ADAR33MD60G	
	15	E60	0.26	22	BMVK100ADA150ME60G		0.47	D60	0.18	3.4	BMVK500ADAR47MD60G	
	33	F60	0.26	35	BMVK100ADA330MF60G		0.68	D60	0.18	4.1	BMVK500ADAR68MD60G	
16	4.7	D60	0.24	12	BMVK160ADA4R7MD60G		1.0	D60	0.18	5.5	BMVK500ADA1R0MD60G	
	10	E60	0.24	20	BMVK160ADA100ME60G		1.5	D60	0.18	7.5	BMVK500ADA1R5MD60G	
	22	F60	0.24	32	BMVK160ADA220MF60G		2.2	E60	0.18	10	BMVK500ADA2R2ME60G	
25	3.3	D60	0.20	10	BMVK250ADA3R3MD60G		3.3	E60	0.18	13	BMVK500ADA3R3ME60G	
	6.8	E60	0.20	17	BMVK250ADA6R8ME60G		4.7	F60	0.18	16	BMVK500ADA4R7MF60G	
	15	F60	0.20	28	BMVK250ADA150MF60G		6.8	F60	0.18	20	BMVK500ADA6R8MF60G	
35	2.2	D60	0.18	8.8	BMVK350ADA2R2MD60G							
	4.7	E60	0.18	15	BMVK350ADA4R7ME60G							
	10	F60	0.18	23	BMVK350ADA100MF60G							