

Alchip® MVK-BP Series

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

MVK-BP

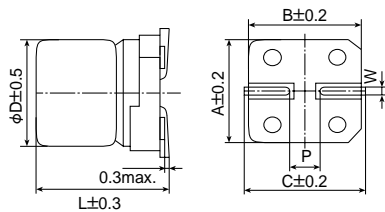
↑
bi-polarized
MVK



◆ SPECIFICATIONS

Items	Characteristics	
Category	-40 to +105°C	
Temperature Range	-40 to +105°C	
Rated Voltage Range	6.3 to 50V _{dc}	
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 _{dc})	6.3V 10V 16V 25V 35V 50V tanδ (Max.) 0.35 0.26 0.24 0.20 0.18 0.18 (at 20°C, 120Hz)
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (V _{dc})	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 (at 120Hz)
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

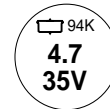
◆ DIMENSIONS (Terminal Type=VC) [mm]



Case 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

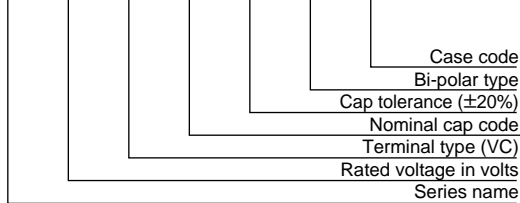
◆ MARKING

EX) 35V4.7μF



◆ PART NUMBERING SYSTEM

MVK 50 VC R1 M BP D60



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

◆ STANDARD RATINGS

μF \ V _{dc}	6.3	10	16	25	35	50
0.10						D60 1.3
0.15						D60 1.9
0.22						D60 2.3
0.33						D60 2.8
0.47						D60 3.4
0.68						D60 4.1
1.0						D60 5.5
1.5						D60 7.5
2.2					D60 8.8	E60 10
3.3				D60 10		E60 13
4.7			D60 12		E60 15	F60 16
6.8		D60 13		E60 17		F60 20
10	D60 14		E60 20		F60 23	
15		E60 22		F60 28		
22	E60 25		F60 32			
33		F60 35				
47	F60 39					

Note : → Use next higher voltage part.