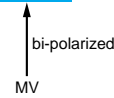


# Alchip® MV-BP Series

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

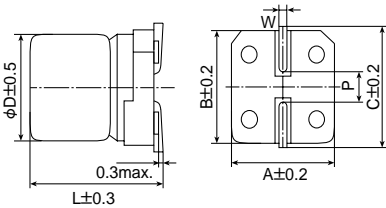
MV-BP



## ◆ SPECIFICATIONS

Items	Characteristics								
Category	-40 to +85°C								
Temperature Range	-40 to +85°C								
Rated Voltage Range	4 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> )	4V	6.3V	10V	16V	25V	35V	50V	(at 20°C, 120Hz)
	tanδ (Max.)	0.45	0.32	0.26	0.24	0.22	0.20	0.20	
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (V <sub>dc</sub> )	4V	6.3V	10V	16V	25V	35V	50V	(at 120Hz)
	Z(-25°C)/Z(+20°C)	7	4	3	2	2	2	2	
	Z(-40°C)/Z(+20°C)	15	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 2000 hours at 85°C, however the polarization shall be reversed every 250 hours.								
	Capacitance change	≤±20% of the initial value							
	D.F. (tanδ)	≤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 500 hours at 85°C without voltage applied.								
	Capacitance change	≤±15% of the initial value							
	D.F. (tanδ)	≤150% of the initial specified value							
	Leakage current	≤The initial specified value							

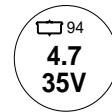
## ◆ DIMENSIONS (Terminal Type=VC) [mm]



Case code	D	L	A	B	C	W	P
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

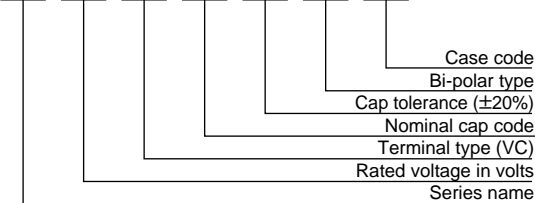
## ◆ MARKING

EX) 35V4.7μF



## ◆ PART NUMBERING SYSTEM

MV 50 VC R47 M BP D55



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

## ◆ STANDARD RATINGS

μF \ V <sub>dc</sub>	4	6.3	10	16	25	35	50
0.1							D55 1.3
0.15							D55 1.9
0.22							D55 2.3
0.33							D55 2.8
0.47							D55 3.4
0.68							D55 4.1
1.0							D55 5.5
1.5							D55 6.5
2.2						D55 8	E55 9
3.3					D55 9	E55 11	F55 14
4.7				D55 11	E55 13	F55 17	
6.8				D55 12	E55 15	F55 21	
10				D55 13	E55 18	F55 24	
15	D55 14	E55 21	F55 28				
22		E55 23	F55 33				
33			F55 36				
47							

Note : → Use next higher voltage part.