

Alchip® MVL Series

- Endurance : 105°C 3000 to 5000 hours (F80 to J10 added)
- Suitable for applications requiring long life such as continuously operating equipment, industrial applications, etc
- Solvent-proof type (see PRECAUTIONS AND GUIDELINES)

MVL

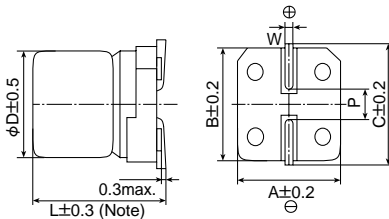
↑ Longer life
MVJ



◆ SPECIFICATIONS

Items	Characteristics																							
Category	-40 to +105°C																							
Temperature Range																								
Rated Voltage Range	6.3 to 50V _{dc}																							
Capacitance Tolerance	±20%(M) (at 20°C, 120Hz)																							
Leakage Current	I=0.03CV or 4μA, 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)	<table border="1"> <tr> <td>Rated voltage (V_{dc})</td> <td>6.3V</td> <td>10V</td> <td>16V</td> <td>25V</td> <td>35V</td> <td>50V</td> <td></td> </tr> <tr> <td>Max. tanδ</td> <td>0.28</td> <td>0.24</td> <td>0.20</td> <td>0.16</td> <td>0.13</td> <td>0.12</td> <td>(at 20°C, 120Hz)</td> </tr> </table>	Rated voltage (V _{dc})	6.3V	10V	16V	25V	35V	50V		Max. tanδ	0.28	0.24	0.20	0.16	0.13	0.12	(at 20°C, 120Hz)							
Rated voltage (V _{dc})	6.3V	10V	16V	25V	35V	50V																		
Max. tanδ	0.28	0.24	0.20	0.16	0.13	0.12	(at 20°C, 120Hz)																	
Low Temperature Characteristics (Max. impedance Ratio)	<table border="1"> <tr> <td>Rated voltage(V_{dc})</td> <td>6.3V</td> <td>10V</td> <td>16V</td> <td>25V</td> <td>35V</td> <td>50V</td> <td></td> </tr> <tr> <td>Z(-25°C)/Z(+20°C)</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td rowspan="2">(120Hz)</td> </tr> <tr> <td>Z(-40°C)/Z(+20°C)</td> <td>10</td> <td>7</td> <td>5</td> <td>3</td> <td>3</td> <td>3</td> </tr> </table>	Rated voltage(V _{dc})	6.3V	10V	16V	25V	35V	50V		Z(-25°C)/Z(+20°C)	4	3	2	2	2	2	(120Hz)	Z(-40°C)/Z(+20°C)	10	7	5	3	3	3
Rated voltage(V _{dc})	6.3V	10V	16V	25V	35V	50V																		
Z(-25°C)/Z(+20°C)	4	3	2	2	2	2	(120Hz)																	
Z(-40°C)/Z(+20°C)	10	7	5	3	3	3																		
Endurance	After the capacitors are subjected to the rated DC voltage for 3000 hours (H10 & J10 sizes 5000 hours) at 105°C, the following specifications shall be satisfied when the capacitors are restored to 20°C.																							
Capacitance change	≤±30% of the initial measured 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 1000 hours at 105°C without voltage applied.																							
Capacitance change	≤±30% of the initial measured value																							
D.F. (tanδ)	≤300% of the initial specified value																							
Leakage current	≤The initial specified value																							

◆ DIMENSIONS (Terminal Type=VC) [mm]



Note : L±0.5 for H10 to J10

Case code	Outer dimensions						
	D	L	A	B	C	W	P
D60	4	5.7	4.3	4.3	5.1	0.5 - 0.8	1.0
E60	5	5.7	5.3	5.3	5.9	0.5 - 0.8	1.4
F60	6.3	5.7	6.6	6.6	7.2	0.5 - 0.8	1.9
F80	6.3	7.7	6.6	6.6	7.2	0.5 - 0.8	1.9
H63	8	6.3	8.3	8.3	9.0	0.5 - 0.8	2.3
H10	8	10.0	8.3	8.3	9.0	0.7 - 1.1	3.1
J10	10	10.0	10.3	10.3	11.0	0.7 - 1.1	4.5

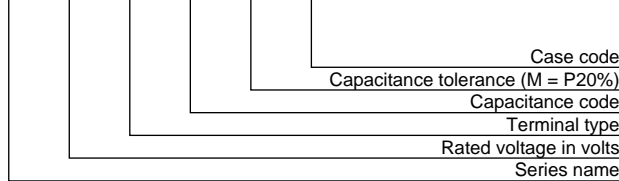
◆ MARKING

EX) 16V47μF



◆ PART NUMBERING SYSTEM

MVL 35 VC 10 M E60



Capacitance	Code
0.1μF	R1
2.2μF	2R2
10μF	10
100μF	100

◆ STANDARD RATINGS

μF	V _{dc}	6.3	10	16	25	35	50
0.1							D60 1.0
0.22							D60 2.6
0.33							D60 3.2
0.47							D60 3.8
1.0							D60 6.2
2.2							D60 11
3.3							D60 14
4.7						D60 15	E60 19
10				D60 18		E60 25	F60 30
22	D60	22		E60 30		F60 42	F80 49
33			E60 35		F60 48	F80 57	H10 77
47	E60	36		F60 50	F80 63		H10 92
100	F60	60		F80 81	H10 116		J10 151
220	F80	101	H10 141			J10 216	
330	H10	160			J10 238		
470				J10 254			
1,000	J10	313					

Note : → Use a next higher voltage capacitor.