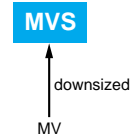


Alchip® MVS Series

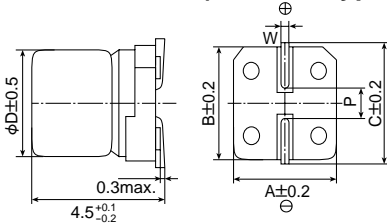
- 4.5mm height
- Endurance : 85°C 2000 hours
- Reflow capability
- Solvent-proof type (see PRECAUTIONS AND GUIDELINES)



◆ SPECIFICATIONS

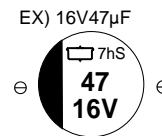
Items	Characteristics	
Category Temperature Range	-40 to +85°C	
Rated Voltage Range	4 to 50V _{dc}	
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)	
Leakage Current	I = 0.01CV or 3μA, whichever is greater. Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20°C after 2 minutes)	
Dissipation Factor (tanδ)	Rated voltage (V _{dc})	4V 6.3V 10V 16V 25V 35V 50V
	tanδ (Max.)	0.50 0.30 0.24 0.19 0.16 0.14 0.14 (at 20°C, 120Hz)
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (V _{dc})	4V 6.3V 10V 16V 25V 35V 50V
	Z(-25°C)/Z(+20°C)	7 4 3 2 2 2 2
	Z(-40°C)/Z(+20°C)	15 8 8 4 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 2000 hours at 85°C.	
	Rated voltage	4 & 6.3V _{dc} 10 to 50V _{dc}
	Capacitance change	≤±30% of the initial value ≤±25% of the initial value
	DF (tanδ)	≤300% of the initial specified value ≤300% 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 1000 hours at 85°C without voltage applied.	
	Rated voltage	4 & 6.3V _{dc} 10 to 50V _{dc}
	Capacitance change	≤±30% of the initial value ≤±25% of the initial value
	DF (tanδ)	≤300% of the initial specified value ≤300% of the initial specified value
	Leakage current	≤The initial specified value ≤The initial specified value

◆ DIMENSIONS (Terminal Type=VC) [mm]

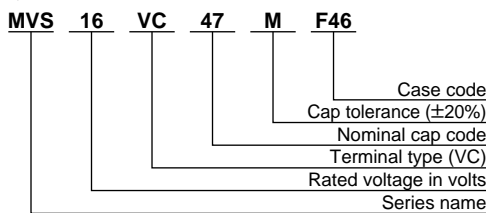


Case code	D	A	B	C	W	P
D46	4	4.3	4.3	5.1	0.5 to 0.8	1.0
E46	5	5.3	5.3	5.9	0.5 to 0.8	1.4
F46	6.3	6.6	6.6	7.2	0.5 to 0.8	1.9

◆ MARKING



◆ PART NUMBERING SYSTEM



Capacitance	Code
0.1μF	R1
0.47μF	R47
1.0μF	1
4.7μF	4R7
10μF	10
100μF	100

◆ STANDARD RATINGS

μF \ V _{dc}	4	6.3	10	16	25	35	50
0.1							D46 1.0
0.22							D46 2.0
0.33							D46 2.8
0.47							D46 4.0
1.0							D46 8.4
2.2							D46 13
3.3							D46 17
4.7							D46 20
10				D46 23		D46 18	E46 20
22				E46 37		E46 29	F46 33
33	D46 28					F46 46	
47	D46 33	E46 45		F46 58	F46 52		
100	E46 56	F46 70					
220	F46 96						

Note : → Use next higher voltage part.