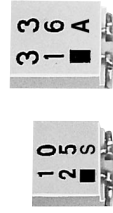


Alchip® MFS/MFA Series

- Downsized from current standard MF series
- 3.5 to 4.5 mm height
- MFS : case code B46 to D46, MFA : case code D80
- Capable of reducing mounting area on PC board



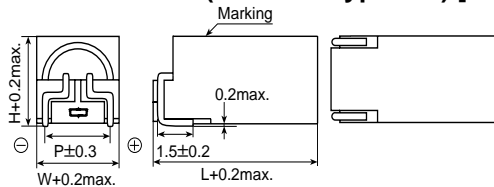
↓ downsized
MF



◆ SPECIFICATIONS

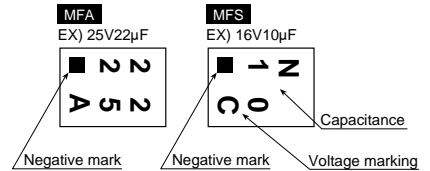
Items	Characteristics								
Category	Temperature Range								
Temperature Range	-40 to +85°C								
Rated Voltage Range	4 to 35V _{dc}								
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)								
Leakage Current	I=0.01CV or 3μA, whichever is greater. Where, I : Max. leakage current (μA), C : Nominal 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		
	tanδ (Max.)	0.65	0.55	0.45	0.35	0.20	0.18		
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (V _{dc})	Z(-25°C)/Z(+20°C)	MFS B46 & C46	9	6	4	3	2	2
			MFS D46	7	4	3	2	2	2
	Z(-40°C)/Z(+20°C)	MFA D80	7	4	3	2	2	2	
		MFS B46 & C46	17	12	9	7	5	4	
		MFS D46	15	10	8	6	4	3	
		MFA D80	15	10	8	6	4	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 (B46 & C46 sizes 1000 hours) at 85°C.								
	Case code	B46 & C46		D46 & D80		D46 & D80			
	Rated Voltage	4 to 35V _{dc}		4 to 6.3V _{dc}		10 to 35V _{dc}			
	Capacitance change	≤±25% of the initial value		≤±30% of the initial value		≤±25% of the initial value			
	D.F. (tanδ)	≤200% of the initial specified value		≤300% of the initial specified value		≤300% of the initial specified value			
	Leakage current	≤The initial specified value		≤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 500 hours at 85°C without voltage applied.								
	Capacitance change	≤±20% of the initial value							
	D.F. (tanδ)	≤200% of the initial specified value							
	Leakage current	≤The initial specified value							

◆ DIMENSIONS (Terminal Type=FC) [mm]



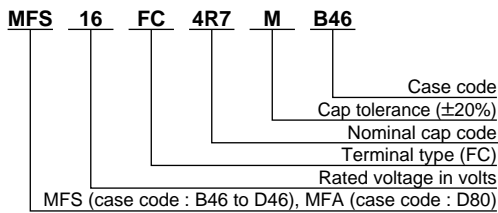
Series	Case code	L	W	H	P
MFS	B46	4.8	3.6	3.5	3.0
	C46	4.8	4.1	4.0	3.5
	D46	4.8	4.6	4.5	4.0
MFA	D80	8.3	4.6	4.5	4.0

◆ MARKING



V _{dc}	4	6.3	10	16	25	35
Mark	g	j	A	C	E	V

◆ PART NUMBERING SYSTEM



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

◆ STANDARD RATINGS

μF	4		6.3		10		16		25		35	
0.1											B46	0.9
0.22											B46	2.0
0.33											B46	2.6
0.47											B46	3.2
1.0											B46	4.6
2.2											B46	6.5
3.3											B46	8.3
4.7					B46	6.0	B46	5.5	B46	7.5	B46	12
10	B46	7.5	B46	8.2	B46	8.5	B46	10	D46	15	D80	20
22	B46	11	C46	16	D46	18	D46	20	D80	27	D80	29
33	C46	14	D46	19	D46	20	D80	25	D80	34		
47	D46	21	D46	22	D80	27	D80	35				
100	D80	32	D80	35								

Represent MFA series