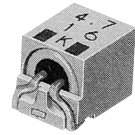


Alchip® MFK-BP Series

- 3.5 to 4.5mm height
- Bi-polarized chip type for the circuit, of which polarity is frequently reversed
- Solvent-proof type (see PRECAUTIONS AND GUIDELINES)

MFK-BP

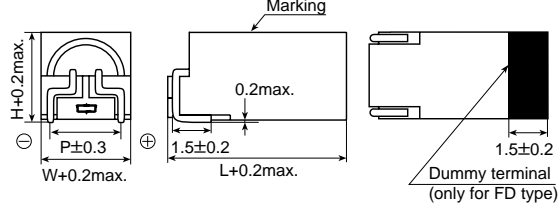
↑ bi-polarized
MFK



◆ SPECIFICATIONS

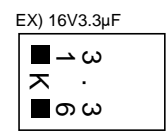
Items	Characteristics						
Category	-40 to +105°C						
Temperature Range							
Rated Voltage Range	6.3 to 50V _{dc}						
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)						
Leakage Current	I=0.05CV or 10μA, whichever is greater. Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), 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	0.30	0.26	0.24	0.22	0.22
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (V _{dc})	6.3V	10V	16V	25V	35V	50V
	Z(-25°C)/Z(+20°C)	6	4	3	2	2	2
	Z(-40°C)/Z(+20°C)	12	9	7	5	4	4
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.						
	Case code	B6 & C6			D6 & D8		
	Capacitance change	≤±30% of the initial value			≤±20% of the initial value		
	D.F. (tanδ)	≤200% of the initial specified value			≤200% 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 500 hours at 105°C without voltage applied.						
	Case code	B6 & C6			D6 & D8		
	Capacitance change	≤±25% of the initial value			≤±15% of the initial value		
	D.F. (tanδ)	≤200% of the initial specified value			≤150% of the initial specified value		
	Leakage current	≤The initial specified value			≤The initial specified value		

◆ DIMENSIONS (Terminal Type=FC or FD <dummy terminal>) [mm]

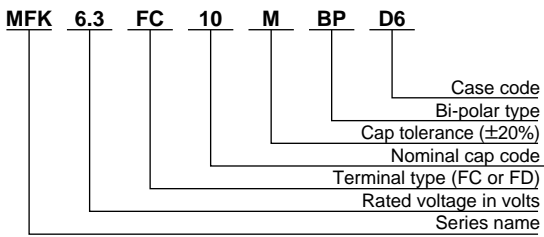


Case code	L	W	H	P
B6	6.3	3.6	3.5	3.0
C6	6.3	4.1	4.0	3.5
D6	6.3	4.6	4.5	4.0
D8	8.3	4.6	4.5	4.0

◆ MARKING



◆ PART NUMBERING SYSTEM



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	
0.1											B6	1.3
0.22											B6	1.9
0.33											B6	2.4
0.47											B6	2.8
1.0											B6	4.5
2.2											D8	8.2
3.3	B6	6.2	B6	6.4	C6	7.6	D6	8.8	D8	10.1		
4.7	B6	7.1	C6	8.4	D6	10.1	D8	11.5				
10	D6	12.7	D8	15								

Case code

Rated ripple current (mArms) at 105°C, 120Hz