WIMA FKC 2

PCM 5

Polycarbonate film and foil capacitors for pulse applications in PCM 5 mm

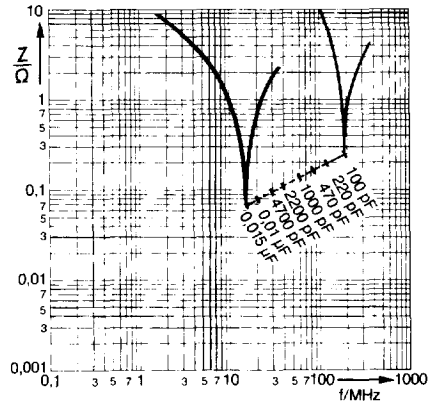
■ Low induction and low damping with high resonant frequency. ■ With almost linear capacitance temperature coefficient. ■ High pulse duty. ■ Reservoir and decoupling capacitors for high-speed digital circuits. ■ Great variety of applications with severe temperature changes. ■ Close tolerances up to 2.5 %. ■ Available taped and reeled.

Technical Data

Dielectric: Polycarbonate film.
Capacitor electrodes: Metal foil.
Encapsulation: Flame-retardent plastic case, UL 94 V–0, with epoxy resin seal. Colour: Yellow. Marking: Black.
Temperature range: – 55° C to + 100° C.
Test specifications: In accordance with IEC 60384-12 and EN 131700.
Test category: 55/100/56 in accordance with IEC.
Insulation resistance at + 20° C:
$\geqslant 5 \times 10^5$ megohms (mean value: 1×10^6 megohms)
In accordance with IEC 60384-12 and EN 131700.
Measuring voltage: 100 V/1 min.
Dissipation factors at + 20° C:
tan δ $\leqslant 2 \times 10^{-3}$ at 1 kHz
tan δ $\leqslant 4 \times 10^{-3}$ at 10 kHz
tan δ $\leqslant 8 \times 10^{-3}$ at 100 kHz
Capacitance tolerances: ± 20 %, ± 10 %, ± 5 %, ± 2.5 %.
Temperature characteristics: See graph page 5.
Maximum pulse rise time: 1000 V/microsecond for pulses equal to the rated voltage.
Test voltage: 2 Ur, 2 sec.
Vibration: 6 hours at 10...2000 Hz and 0.75 mm displacement amplitude or 10 g in accordance with IEC 60068-2-6.

Low air density: 1 kPa = 10 mbar in accordance with IEC 60068-2-13.
Bump test: 4000 bumps at 390 m/sec^2 in accordance with IEC 60068-2-29.
Voltage derating: A voltage derating factor of 1 % per K must be applied from + 85° C for DC voltages and from + 75° C for AC voltages.

Graphs see page 5.



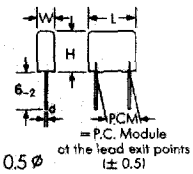
Impedance change with frequency (general guide)

General Data

Capacitance	100 VDC / 63 VAC* W	H	L	PCM**	250 VDC / 160 VAC* W	H	L	PCM**	400 VDC / 220 VAC* W	H	L	PCM**
100 pF	2.5	6.5	7.2	**5**	2.5	6.5	7.2	**5**	2.5	6.5	7.2	**5**
150 „	2.5	6.5	7.2	**5**	2.5	6.5	7.2	**5**	2.5	6.5	7.2	**5**
220 „	2.5	6.5	7.2	**5**	2.5	6.5	7.2	**5**	2.5	6.5	7.2	**5**
330 „	2.5	6.5	7.2	**5**	2.5	6.5	7.2	**5**	2.5	6.5	7.2	**5**
470 „	2.5	6.5	7.2	**5**	2.5	6.5	7.2	**5**	2.5	6.5	7.2	**5**
680 „	2.5	6.5	7.2	**5**	2.5	6.5	7.2	**5**	3.5	8.5	7.2	**5**
1000 pF	2.5	6.5	7.2	**5**	3.5	8.5	7.2	**5**	3.5	8.5	7.2	**5**
1500 „	2.5	6.5	7.2	**5**	3.5	8.5	7.2	**5**	3.5	8.5	7.2	**5**
2200 „	2.5	6.5	7.2	**5**	3.5	8.5	7.2	**5**	4.5	9.5	7.2	**5**
3300 „	2.5	6.5	7.2	**5**	4.5	9.5	7.2	**5**				
4700 „	3.5	8.5	7.2	**5**								
6800 „	3.5	8.5	7.2	**5**								
0.01 µF	4.5	9.5	7.2	**5**								
0.015 „	4.5	9.5	7.2	**5**								

* AC voltage: f $\leqslant$ 400 Hz; 1.4 × Urms + UDC $\leqslant$ Ur
** PCM = Printed circuit module = lead spacing

Dims. in mm.



Taped version see page 92.