

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-retardant plastic case, UL 94 V-O, with epoxy resin seal. Colour: Yellow. Marking: Black.

Temperature range: -55° C to +100° C.

Test specifications: In accordance with IEC 60384-12 and CECC 31700.

Test category: 55/100/56 in accordance with IEC.

Insulation resistance at +20° C:

$\geq 5 \times 10^5$ megohms (mean value; 1×10^6 megohms)

In accordance with IEC 60384-12 and CECC 31700.

Measuring voltage: 100 V/1 min.

Dissipation factors at +20° C:

$\tan \delta \leq 2 \times 10^{-3}$ at 1 kHz

$\tan \delta \leq 4 \times 10^{-3}$ at 10 kHz

$\tan \delta \leq 8 \times 10^{-3}$ at 100 kHz

Capacitance tolerances: $\pm 20\%$, $\pm 10\%$, $\pm 5\%$, $\pm 2.5\%$.

Temperature characteristics: See graph page 5.

Maximum pulse rise time: 1000 V/microsecond for pulses equal to the rated voltage.

Test voltage: 2 Vr, 2 sec.

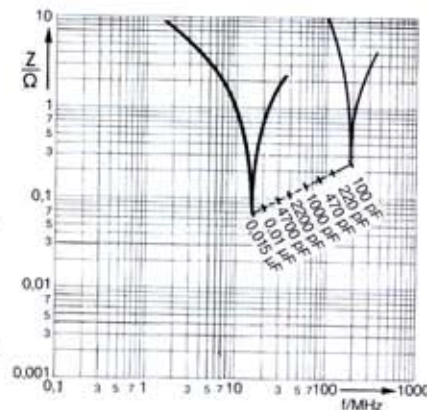
Vibration: 6 hours at 10...2000 Hz and 0.75 mm displacement amplitude or 10 g in accordance with IEC 60068-2-6.

Low air density: 1 kPa = 10 mbar in accordance with IEC 60068-2-13.

Bump test: 4000 bumps at 390 m/sec² 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*				250 VDC / 160 VAC*				400 VDC / 220 VAC*				* AC voltage: $f \leq 400$ Hz; $1.4 \times V_{rms} + VDC \leq VDC$ (rated) ** PCM = Printed circuit module = lead spacing
	W	H	L	PCM**	W	H	L	PCM**	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	Dims. in mm. d = 0.5 φ PCM = P.C. Module at the lead exit points ± 0.5l
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	Taped version see page 88. Rights reserved to amend design data without prior notification.
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									