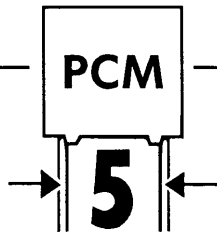


# WIMA FKC 2



## 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-O, with epoxy resin seal. Colour: Yellow. Marking: Black.

**Temperature range:** - 55° C to + 100° C.

**Test specifications:** In accordance with IEC 384-12 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:  $1 \times 10^6$  megohms)

In accordance with IEC 384-12 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.

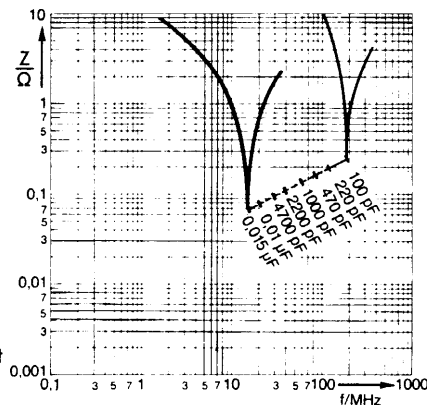
**Vibration:** 6 hours at 10... 2000 Hz and 0.75 mm displacement amplitude or 10 g in accordance with IEC 68-2-6.

**Low air density:** 1 kPa = 10 mbar in accordance with IEC 68-2-13.

**Bump test:** 4000 bumps at 390 m/sec<sup>2</sup> in accordance with IEC 68-2-29.

**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.  Taped version see page 71. Rights reserved to amend design data without prior notification.
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 $\mu$ F	4.5	9.5	7.2	5									
0.015 .	4.5	9.5	7.2	5									