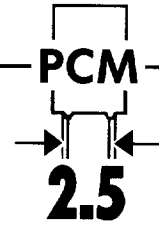


WIMA FKC 02



Polycarbonate film and foil capacitors for pulse applications in PCM 2.5 mm

- Reservoir and decoupling capacitors for high-speed digital circuits.
- Constant capacitance value with temperature.
- High pulse duty.
- Low ESR.
- For applications with wide temperature range, e.g. automotive (under the hood).
- Available taped and reeled.

Technical Data

Dielectric: Polycarbonate film.

Capacitor electrodes: Metal foil.

Encapsulation: Flame-retardant 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: 55/100/21 in accordance with IEC.

Insulation resistance at +20° C:

≥ 5 × 10⁵ megohms (mean value: 1 × 10⁶ megohms)

In accordance with IEC 60384-12 and EN 131700.

Measuring voltage: 100 V/1 min.

Dissipation factors at +20° C:

tan δ ≤ 2 × 10⁻³ at 1 kHz

tan δ ≤ 4 × 10⁻³ at 10 kHz

tan δ ≤ 8 × 10⁻³ at 100 kHz

Capacitance tolerances: ± 20%, ± 10%, ± 5%.

Temperature characteristics: See graph page 5.

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

Test voltage: 2 U_r, 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.

General Data

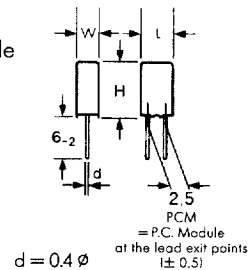
Capacitance	100 VDC / 63 VAC*			PCM**
	W	H	L	
100 pF	2.5	7	4.6	2.5
150 "	2.5	7	4.6	2.5
220 "	2.5	7	4.6	2.5
330 "	2.5	7	4.6	2.5
470 "	2.5	7	4.6	2.5
680 "	2.5	7	4.6	2.5
1000 pF	2.5	7	4.6	2.5
1500 "	2.5	7	4.6	2.5
2200 "	3	7.5	4.6	2.5
3300 "	3.8	8.5	4.6	2.5
4700 "	3.8	8.5	4.6	2.5
6800 "	4.6	9	4.6	2.5
0.01 μF	4.6	9	4.6	2.5

* AC voltage: f ≤ 400 Hz;
1.4 × U_{rms} + U_{DC} ≤ U_r

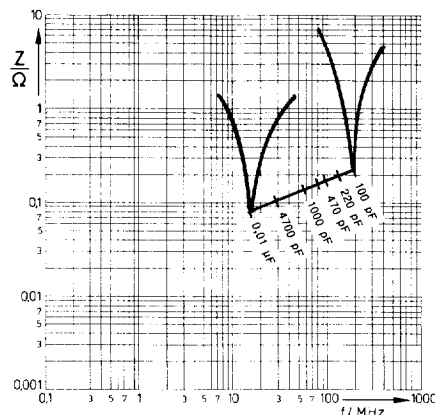
** PCM = Printed circuit module
= lead spacing

Dims. in mm

Taped version
see page 92.



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Impedance change with frequency (general guide)