



**Product Range**

- SMD
- PCM 2.5 mm
- PCM 5.0 mm
- PCM 7.5 - 37.5 mm metallized
- PCM 7.5 - 15 mm film/foil
- For high current ratings
- Snubber capacitors
- RFI-capacitors

Who is WIMA

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Technical Information

SMD-Sample Box

**TECHNICAL SPOTLIGHT**

**WIMA FKS 2**



**Polyester film and foil capacitors for pulse applications in PCM 5 mm**

- Low induction and low damping with high resonant frequency.
- Low ESR because of metal foil electrodes and end-surface contacts.
- High pulse duty.
- Reservoir and decoupling capacitors for high-speed digital circuits.
- Available taped and reeled.

**Technical Data**

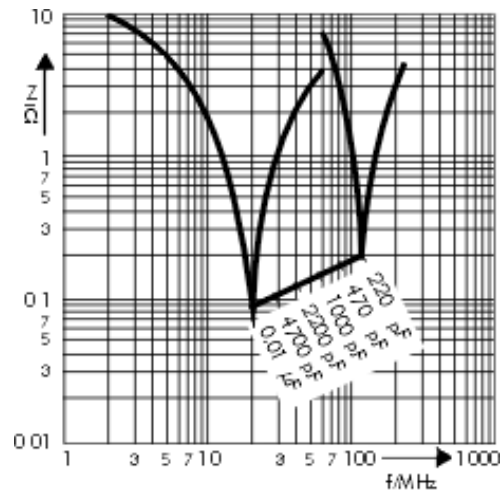
**Dielectric:** Polyethylene terephthalate film.  
**Capacitor electrodes:** Metal foil.  
**Encapsulation:** Flame retardent plastic case, UL 94 V-0, with epoxy resin seal.  
 Colour: Red. Epoxy resin seal: Yellow. Marking: Silver.  
**Temperature range:** -55° C to +100° C.  
**Test specifications:** In accordance with IEC 60384-11 and EN 130100.  
**Test category:** 55/100/56 in accord. with IEC.  
**Insulation resistance** at +20° C:  
 $\geq 3 \times 10^4 \text{ M}\Omega$  (mean value:  $8 \times 10^5 \text{ M}\Omega$ ).  
 In accord. with IEC 60384-11 and EN 130100.  
 Measuring voltage: 100 V/1 min.  
**Dissipation factors** at +20° C:  
 $\tan \delta \leq 7 \times 10^{-3}$  at 1 kHz  
 $\tan \delta \leq 15 \times 10^{-3}$  at 10 kHz  
 $\tan \delta \leq 20 \times 10^{-3}$  at 100 kHz  
**Capacitance tolerances:**  $\pm 20\%$ ,  $\pm 10\%$ ,  $\pm 5\%$ .  
**Maximum pulse rise time:** 1000 V/ $\mu\text{sec}$  for pulses equal to the rated voltage.  
**Test voltage:** 2 Ur, 2 sec.

[Graphs:](#) / [Taping:](#)

[Example for ordering/Part number](#)

**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<sup>2</sup> in accordance with IEC 60068-2-29.  
**Voltage derating:** A voltage derating factor of 1.25% per K must be applied from +85° C for DC voltages and from +75° C for AC voltages.

Impedance change with frequency (general guide)



**General Data**

| Capacitance | 100VDC/63VAC* |     |     |       | 250VDC/160VAC* |     |     |       | 400VDC/200VAC* |     |     |       | *AC voltage: f = 50 Hz;<br>1.4 x Urms + UDC ≤ Ur<br>**PCM = Printed circuit module = lead spacing. |
|-------------|---------------|-----|-----|-------|----------------|-----|-----|-------|----------------|-----|-----|-------|--|
|             | W             | H   | L   | PCM** | W              | H   | L   | PCM** | W              | H   | L   | PCM** |  |
| 220 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  |
| 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     | 2.5            | 6.5 | 7.2 | 5     |  |

WIMA polyester film and foil capacitors in PCM 5 mm

|              |     |     |     |   |     |     |     |   |     |     |     |   |
|--------------|-----|-----|-----|---|-----|-----|-----|---|-----|-----|-----|---|
| 1000pF       | 2.5 | 6.5 | 7.2 | 5 | 2.5 | 6.5 | 7.2 | 5 | 2.5 | 6.5 | 7.2 | 5 |
| 1500 "       | 2.5 | 6.5 | 7.2 | 5 | 2.5 | 6.5 | 7.2 | 5 | 2.5 | 6.5 | 7.2 | 5 |
| 2200 "       | 2.5 | 6.5 | 7.2 | 5 | 2.5 | 6.5 | 7.2 | 5 | 2.5 | 6.5 | 7.2 | 5 |
| 3300 "       | 2.5 | 6.5 | 7.2 | 5 | 2.5 | 6.5 | 7.2 | 5 | 2.5 | 6.5 | 7.2 | 5 |
| 4700 "       | 2.5 | 6.5 | 7.2 | 5 | 2.5 | 6.5 | 7.2 | 5 | 2.5 | 6.5 | 7.2 | 5 |
| 6800 "       | 2.5 | 6.5 | 7.2 | 5 | 2.5 | 6.5 | 7.2 | 5 | 3   | 7.5 | 7.2 | 5 |
| 0.01 $\mu$ F | 3   | 7.5 | 7.2 | 5 | 3   | 7.5 | 7.2 | 5 | 3.5 | 8.5 | 7.2 | 5 |

