

# WIMA MKC 2

PCM

5

## Metallized polycarbonate capacitors in PCM 5 mm

- Polycarbonate dielectric for PCM 5 mm applications.
- Constant capacitance value with temperature.
- Ideally suited for applications with wide temperature range, e.g. automotive (under the hood).
- Available taped and reeled.

### Technical Data

**Dielectric:** Polycarbonate film.

**Capacitor electrodes:** Vacuum-deposited aluminium.

**Encapsulation:** Flame-retardant plastic case, UL 94 V-0, with epoxy resin seal. Colour: Red. Marking: Black.

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

**Test specifications:** In accordance with IEC 60384-6 and EN 130 500.

**Test category:** 55/100/21 in accordance with IEC.

**Insulation resistance** at +20° C:

| $U_r$                  | $U_{test}$ | $C \leq 0.33 \mu F$  | $0.33 \mu F < C = 0.47 \mu F$   |
|------------------------|------------|--|---|
| 63 VDC                 | 50 V       | $\geq 3.75 \times 10^3 M\Omega$<br>Mean value: $5 \times 10^4 M\Omega$ | $\geq 1250 \text{ sec } (M\Omega \times \mu F)$<br>Mean value: 3000 sec |
| $\geq 100 \text{ VDC}$ | 100 V      | $\geq 3.75 \times 10^3 M\Omega$<br>Mean value: $5 \times 10^4 M\Omega$ | $\geq 1250 \text{ sec } (M\Omega \times \mu F)$<br>Mean value: 3000 sec |

In accordance with IEC 60384-6 and EN 130 500.

Measuring time: 1 min.

### Maximum pulse rise time:

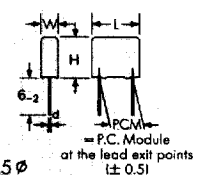
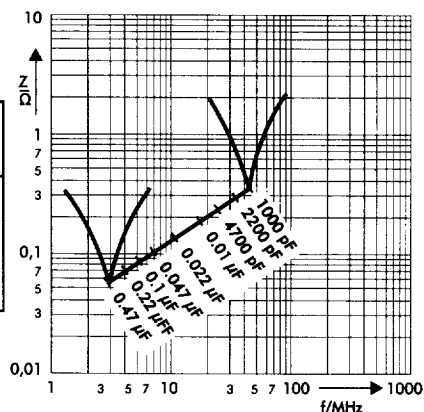
| Capacitance<br>pF/ $\mu F$ | Pulse rise time V/ $\mu\text{sec}$<br>max. operation/test |         |         |
|----------------------------|---|---------|---------|
|                            | 63 VDC  | 100 VDC | 250 VDC |
| 1000 ... 6800              | —   | —       | 50/500  |
| 0.01 ... 0.022             | —   | 35/350  | 40/400  |
| 0.033 ... 0.068            | 20/200  | 20/200  | 30/300  |
| 0.1 ... 0.47               | 15/150  | 15/150  | 25/250  |

for pulses equal to the rated voltage.

### General Data

| Capacitance  | 63 VDC / 40 VAC* |     |     |       | 100 VDC / 63 VAC* |     |     |       | 250 VDC / 160 VAC* |      |     |       | * AC voltage: $f \leq 400 \text{ Hz}$ ,<br>$1.4 \times U_{rms} + U_{DC} \leq U_r$ |
|--------------|------------------|-----|-----|-------|-------------------|-----|-----|-------|--------------------|------|-----|-------|---|
|              | W                | H   | L   | PCM** | W                 | H   | L   | PCM** | W                  | H    | L   | PCM** |   |
| 1000 pF      |                  |     |     |       |                   |     |     |       | 2.5                | 6.5  | 7.2 | 5     | ** PCM = Printed circuit module<br>= lead spacing                                 |
| 1500 „       |                  |     |     |       |                   |     |     |       | 2.5                | 6.5  | 7.2 | 5     |   |
| 2200 „       |                  |     |     |       |                   |     |     |       | 2.5                | 6.5  | 7.2 | 5     |   |
| 3300 „       |                  |     |     |       |                   |     |     |       | 2.5                | 6.5  | 7.2 | 5     |   |
| 4700 „       |                  |     |     |       |                   |     |     |       | 2.5                | 6.5  | 7.2 | 5     |   |
| 6800 „       |                  |     |     |       |                   |     |     |       | 2.5                | 6.5  | 7.2 | 5     |   |
| 0.01 $\mu F$ |                  |     |     |       |                   |     |     |       | 2.5                | 6.5  | 7.2 | 5     | Dims. in mm.  |
| 0.015 „      |                  |     |     |       |                   |     |     |       | 2.5                | 6.5  | 7.2 | 5     |   |
| 0.022 „      |                  |     |     |       |                   |     |     |       | 2.5                | 6.5  | 7.2 | 5     |   |
| 0.033 „      |                  |     |     |       | 2.5               | 6.5 | 7.2 | 5     | 3                  | 7.5  | 7.2 | 5     |   |
| 0.047 „      |                  |     |     |       | 2.5               | 6.5 | 7.2 | 5     | 3.5                | 8.5  | 7.2 | 5     |   |
| 0.068 „      | 3                | 7.5 | 7.2 | 5     | 3                 | 7.5 | 7.2 | 5     | 4.5                | 9.5  | 7.2 | 5     |   |
| 0.1 $\mu F$  | 3.5              | 8.5 | 7.2 | 5     | 3.5               | 8.5 | 7.2 | 5     | 5                  | 10   | 7.2 | 5     | Taped version see page 92.  |
| 0.15 „       | 4.5              | 9.5 | 7.2 | 5     | 4.5               | 9.5 | 7.2 | 5     | 5.5                | 11.5 | 7.2 | 5     |   |
| 0.22 „       | 5                | 10  | 7.2 | 5     | 5                 | 10  | 7.2 | 5     | 7.2                | 13   | 7.2 | 5     |   |
| 0.33 „       | 7.2              | 13  | 7.2 | 5     | 7.2               | 13  | 7.2 | 5     |                    |      |     |       |   |
| 0.33 „       | 7.2              | 13  | 7.2 | 5     | 7.2               | 13  | 7.2 | 5     |                    |      |     |       |   |
| 0.47 „       | 7.2              | 13  | 7.2 | 5     | 7.2               | 13  | 7.2 | 5     |                    |      |     |       |   |

Impedance change with frequency (general guide)



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