# WIMA FKS 02



# Polyester (PET) Film and Foil **Capacitors for Pulse Applications** in PCM 2.5 mm

#### **Special Features**

- Pulse duty construction
- PCM 2.5 mm
- According to RoHS 2002/95/EC

### **Typical Applications**

# For general DC-applications e.g.

- Coupling
- Decoupling

#### Construction

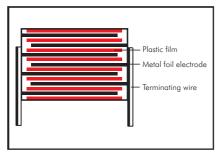
#### Dielectric:

Polyethylene-terephthalate (PET) film

#### Capacitor electrodes:

Metal foil

#### Internal construction:



#### **Encapsulation:**

Solvent-resistant, flame-retardent plastic case with epoxy resin seal, UL 94 V-0

# **Terminations:**

Tinned wire.

# Marking:

Colour: Red. Marking: Blue. Epoxy resin seal: Yellow.

#### **Electrical Data**

#### Capacitance range:

220 pF to 0.015  $\mu$ F (E12-values on request)

#### Rated voltages:

63 VDC, 100 VDC, 250 VDC, 400 VDC

#### Capacitance tolerances:

± 20%, ±10%, ±5%,

# Operating temperature range:

-55° C to +100° C

# **Test specifications:**

In accordance with IEC 60384-11 and EN 130 100

#### Climatic test category:

55/100/21 in accordance with IEC

Insulation resistance at +20° C:

 $\geq 3 \times 10^4 M\Omega$ 

(mean value:  $8 \times 10^5 M\Omega$ )

Measuring voltage:

 $U_r = 63 \text{ V: } U_{test} = 50 \text{ V/1 min.}$   $U_r \geqslant 100 \text{ V: } U_{test} = 100 \text{ V/1 min.}$  **Test voltage:**  $2 U_{rr} 2 \text{ sec.}$ 

# Maximum pulse rise time:

1000  $V/\mu$ sec for pulses equal to the rated voltage

# Dissipation factors at $+20^{\circ}$ C: tan $\delta$

| at f                       | C ≤ 0.015 µF  |
|----------------------------|---|
| 1 kHz<br>10 kHz<br>100 kHz | $\leq 7 \times 10^{-3}$<br>$\leq 15 \times 10^{-3}$<br>$\leq 20 \times 10^{-3}$ |

#### 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.

## **Reliability:**

Operational life > 300 000 hours Failure rate < 5 fit (0.5 x U<sub>r</sub> and 40° C)

# **Mechanical Tests**

# Pull test on leads:

10 N in direction of leads according to IEC 60068-2-21

# 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:

1kPa = 10 mbar in accordance with IEC 60068-2-13

# **Bump test:**

4000 bumps at  $390 \text{ m/sec}^2$  in accordance with IEC 60068-2-29

# **Packing**

Available taped and reeled.

Detailed taping information and graphs at the end of the catalogue.

For further details and graphs please refer to Technical Information.