MMK



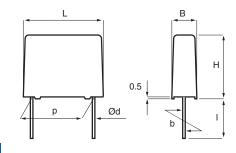
- Metallized polyester
- According to IEC 60384-2, DIN 44122

TYPICAL APPLICATIONS

Bypassing, signal coupling. General purpose for highest reliability.

CONSTRUCTION

Metallized polyester film capacitor. Radial leads of tinned wire are electrically welded to the contact metal layer on the ends of the capacitor winding. Encapsulation in self-extinguishing material meeting the requirements of UL 94V-0.



р	d	std I	b	
5.0 ± 0.4	0.5	4+1	20	± 0.4
7.5 ± 0.4	0.6	4+1	20	± 0.4
10.0 ± 0.4	0.6	4+1	30	± 0.4
15.0 ± 0.4	0.8	4+1	30	± 0.4
22.5 ± 0.4	8.0	4+1	30	± 0.4
27.5 ± 0.4	8.0	4+1	30	± 0.4
37.5 ± 0.5	1.0	4+1	30	± 0.7

TECHNICAL DATA											
Rated voltage U _R , VDC	50	63	100	250	400	630	1000				
Rated voltage U _R , VAC	30	40	63	160	200	220	250				
Capacitance, μF	0.001	0.001	0.001	0.001	0.001	0.001	0.001				
	-10.0	-82	-82	-39	-18	-6.8	-4.7				

Capacitance tolerance ±20%, ±10% standard, ±5%.

Category temperature range -55 ... +100°C

Voltage derating Above +85°C DC and AC voltage derating is 1.25%/°C.

Rated temperature +85°C

Climatic category IEC 60068-1, 55/100/56

DIN 40040, FME

-55 ... +100°C (+125°C)

Average relative humidity $\leq 75\%$ RH = 95% for 30 days per year.

RH = 85% for further days limited by average value per

year, occasional slight condensation permitted.

Test voltage 1.6 x U_R VDC for 2s

Capacitance drift Max. 2% after a 2 year storage period at a temperature

of +10 ... +40°C and a relative humidity of 40...60%.

Reliability Operational life > 200 000 h.

Failure rate < 3 FIT, T = +40°C, U = 0.5 x U_R. Failure criteria according to DIN 44122.

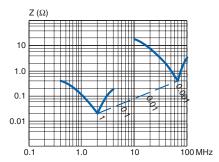
Maximum pulse steepness: dU/dt according to article table. For peak to peak

voltages lower than rated voltage $(U_{pp} < U_{p})$, the specified dU/dt can be multiplied by the factor U_{p}/U_{pp}

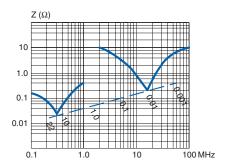
Temperature coefficient +400 (±200) ppm/°C at 1 kHz

Self inductance Approximately 6 nH/cm for the total length of capacitor

winding and the leads.



Resonance frequencies MMK 5



Resonance frequencies MMK7.5 ... 37.5

ENVIRONMENTAL TEST DATA

Damp heat test Test conditions: T = +40°C, RH = 93%, t = 56 days.

Test criteria: $\Delta C/C \leq \pm 5\%$,

 $\begin{array}{l} \Delta \; tan \vartheta \, \leq \, 0.005 \; (1 kHz), \\ IR \; after \; test \quad 0.5 \; x \; IR \; min. \end{array}$

Endurance test Test conditions: $T = +100^{\circ}C$, $U = 1.25 \times (0.8 \times U_p)$,

Test criteria: t = 2000 h.

 $\begin{array}{l} \Delta \text{ C/C} \leq \pm 5\%, \\ \Delta \tan \theta \leq 0.005 \text{ (1kHz)} \\ \Delta \tan \theta \leq 0.010 \text{ (100kHz)} \\ \text{IR after test} \quad 0.5 \text{ x IR min.} \end{array}$

