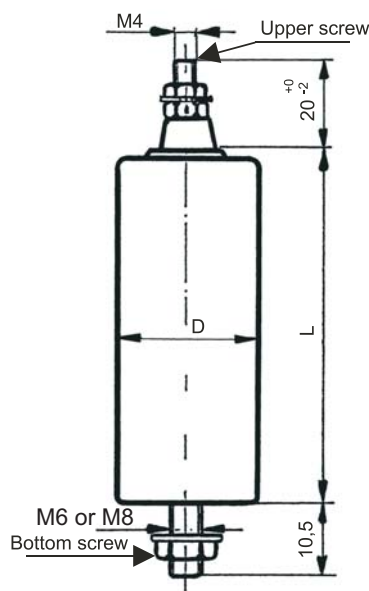


MKT Capacitors for high voltage applications

MKT 500 - 002



Capacit. C_R (μF)	Dimension [mm]			
	D	L	Upper screw	Bottom screw
0,05	25	56	M4	M6
0,10	25	56	M4	M6
0,15	25	56	M4	M6
0,25	30	56	M4	M6
0,33	30	56	M4	M6
0,50	35	56	M4	M8
0,68	35	56	M4	M8
1,0	35	68	M4	M8

Construction:

Metallized electrodes, polyester - film dielectricum, Non-inductive, self-healing construction.

Plastic cylindrical flame retardant case, with bottom screw M6x10, or M8x10

Applications:

High voltage capacitors for DC applications as coupling, decoupling, HV DC power supplies and other DC applications with low ripple current.

Technical data

Rated voltage U_R : 1600V DC

Rated voltage is the max. DC or peak voltage, for which the capacitor is designed.

If the capacitor works with the DC and also super-imposed AC voltage U_{AC} , the sum of DC and the amplitude of AC must not exceed the U_R

Max permissible AC voltage: 400V 50/60Hz, If the working frequency is higher, the permissible AC voltage must be decreased, not to exceed the max. loss power of the capacitor.

$$\text{Max. } U_{AC(f)} = \sqrt{\frac{P_L}{2\pi f C_R \times \text{tg}\delta}}$$

Rated capacitance: $0,05 \pm 2\mu\text{F}$

Tolerance: 10%, 5%,

Dissipation factor $\text{Tg}\delta$: $< 0,01$ at 1kHz and $+25^\circ\text{C}$

Insulation resistance R_{is} : $> 10\,000/\text{C}$ [$\text{M}\Omega$]

Operating temperature range: $-40 \div +85^\circ\text{C}$

The highest permissible capacitor temperature at the hottest point of the case must not exceed $+85^\circ\text{C}$.

Max. permitted dissipation power of the capacitor P_L :

depend on the construction of the capacitor and the cooling conditions, see table.

Test voltage between terminals: $1,25 \times U_R$, 1min. at $+25^\circ\text{C}$

All capacitors are tested by the routine test by the manufacturer

Protection against Overvoltages:

The capacitors are self-healing and regenerate themselves after occasional breakdowns. The capacitor remains fully functional after the breakdown.

Permitted Overvoltages in working conditions:

$1,10 \times U_R$ max. 30% of the service period

$1,15 \times U_R$ max. 30min./day

$1,20 \times U_R$ max. 5min./day

$1,25 \times U_R$ max. 1min./day

If the Overvoltages exceed the permissible values above, the capacitor might have been destroyed.

Test voltage between terminals and case:

3000VDC, 1min. at $+25^\circ\text{C}$

Max. repetitive rate of voltage rise dU/dt :

$< 20\text{V}/\mu\text{sec}$ at U_R and $+25^\circ\text{C}$

Max. peak current I_p :

$< C_R \times dU/dt$

Terminals: upper-screws M4

bottom-screw M6x10

bottom-screw M8x10

Related standards: IEC 60384-1, IEC 60384-2

Marking for purchase ordering: MKT 500-002

0,25 μF /K/1600VDC

Warning! The manufacturer is not responsible for any damages, caused by the improper installation and application. Before using the capacitor in any application, please, read carefully this technical data-sheet.