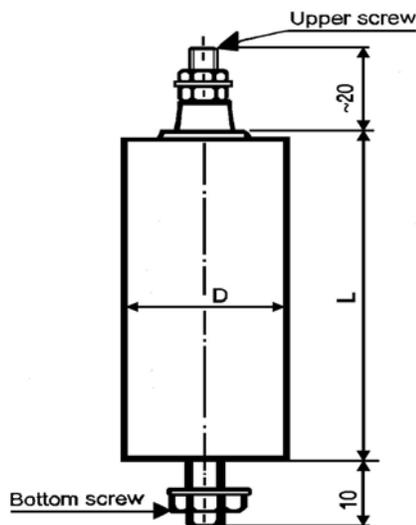


MKT500-058 CAPACITORS FOR HIGH VOLTAGE APPLICATIONS



Capacity C_R [nF]	Dimensions [mm]			
	D	L	Bottom-lead	Upper-lead
47	35	70	M6x10	M4

Construction:

Metallized electrodes, Polyester-film dielectric, Non-inductive, self-healing construction, Plastic cylindrical flame retardant case, with screw-leads

Applications:

High Voltage capacitors for DC applications as coupling, decoupling, HV DC power supplies and other DC applications with lower ripple current

Technical data

Rated voltage U_R : 8200/10 000V 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: 600V 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.

$\text{Max. } U_{AC(t)} < \sqrt{(P_L / 2\pi f C_R)}$

Rated capacitance: $1,0 \div 5$ nF, other capacity on request

Tolerance: $\pm 10\%$, $\pm 5\%$,

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

Insulation resistance R_{IS} : $> 20\,000$ [M Ω]

Operating temperature range: $-40 \div +70^\circ\text{C}$

The highest permissible capacitor temperature at the hottest point of the case must not exceed $+70^\circ\text{C}$.

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

All capacitors are tested by the routine test by the producer

Protection against Over-voltages:

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

Permitted Over-voltages in working conditions:

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

If the Over-voltages exceed the permissible values above, the capacitor might have been destroyed.

Test voltage between terminals and case:

20 000VDC, 1min. at $+25^\circ\text{C}$

Max. repetitive rate of voltage rise dU/dt :

$< 5\text{V}/\mu\text{sec}$ at U_R and $+25^\circ\text{C}$

Max. peak current I_p : $< C_R \times dU/dt$

Related standards: IEC 60384-1, IEC60384-2

Marking for purchase ordering:

MKT500-058 47nF $\pm 10\%$ 8,2/10kVDC

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.