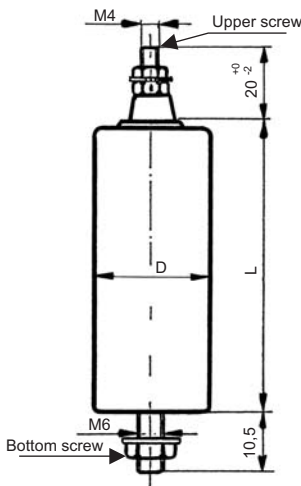


High Voltage Capacitors

MKT 520 - 525



Construction:

Metallized film electrodes with series internal connection, polyester-film dielectricum, non-inductive, self-healing construction. Plastic cylindrical flame retardant case, with bottom screw M6x10, or M8x10, which is one of the leads. The other lead is the screw M4. The capacitor is sealed with epoxy - resin.

Applications:

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

These capacitors replace the of date TESLA types TC 620-625

Technical data

Rated voltage U_R :

1,6 2,5 3,9 6,3 8,2 10kV DC Rated voltage is the max. DC or peak voltage, with which the capacitor may works continuously. If the capacitor works with the DC and also super-imposed AC voltage U_{AC} , the sum of U_{DC} and the amplitude of U_{AC} must not exceed the U_R

Rated capacitance: 1 nF ÷ 1 μ F

Tolerance: $\pm 10\%$, $\pm 5\%$, other tolerances on request

Dissipation factor $Tg\delta$: < 0,01 at 1 kHz and +25°C

Insulation resistance R_{is} : >10 000/C [M Ω , μ F]

Operating temperature range: -40 ÷ +85°C

The highest permissible capacitor temperature at the hottest point of the case must not exceed +85°C.

Test voltage between terminals: 1,25 x U_R , 1min. at +25°C

All capacitors are tested by the routine test by the producer

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 x U_R max. 30% of the service period

1,15 x U_R max.30min./day

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

Test voltage between terminals and case: 16 kVDC, 1min. at +25°C

Max. repetitive rate of voltage rise dU/dt : < 1V/ μ sec at U_R and +25°C

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

Related standards: IEC 60384-1, IEC 60384-16

Marking for purchase ordering: MKT 520 0,25 μ F/K/1600 VDC

Typ	MKT 520	MKT 521	MKT 522	MKT 523	MKT 524	MKT 525
$U_R=DC/AC$ [V]	1600/300	2500/375	3900/400	6300/450	8200/500	10kV/750
Capacit. C_R (nF)	Max. dimension D x L [mm]					
1,0 nF						25 x 56
1,5						25 x 56
2,2						25 x 56
3,3						25 x 56
4,7					25 x 56	30 x 56
6,8					25 x 56	25 x 73
10			25 x 56	25 x 56	25 x 56	25 x 73
12			25 x 56	25 x 56	25 x 56	30 x 73
15			25 x 56	25 x 56	25 x 56	30 x 73
20			25 x 56	25 x 73	25 x 73	35 x 73
22			25 x 56	25 x 73	25 x 73	35 x 73
25		25 x 56	25 x 56	25 x 73	25 x 73	35 x 73
33		25 x 56	25 x 56	25 x 73	30 x 73	40 x 73
47		25 x 56	25 x 73	25 x 73	35 x 73	55 x 73
50		25 x 56	25 x 73	30 x 73	35 x 73	75 x 73
68		25 x 56	25 x 73	35 x 73	40 x 73	
100	25 x 56	25 x 56	25 x 73	40 x 73	55 x 73	
150	25 x 56	25 x 56	30 x 73	50 x 73	63 x 73	
220	25 x 56	35 x 56	35 x 73	55 x 73		
250	25 x 56	35 x 56	40 x 73	63 x 73		
330	25 x 56	40 x 56	50 x 73	75 x 73		
470	25 x 56	45 x 56	63 x 73			
500	25 x 56	45 x 56	75 x 73			
680	25 x 56	50 x 56				
820	30 x 56	55 x 56				
1,0 μ F	30 x 56	63 x 56				

This capacitors are not suitable for across the line applications

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