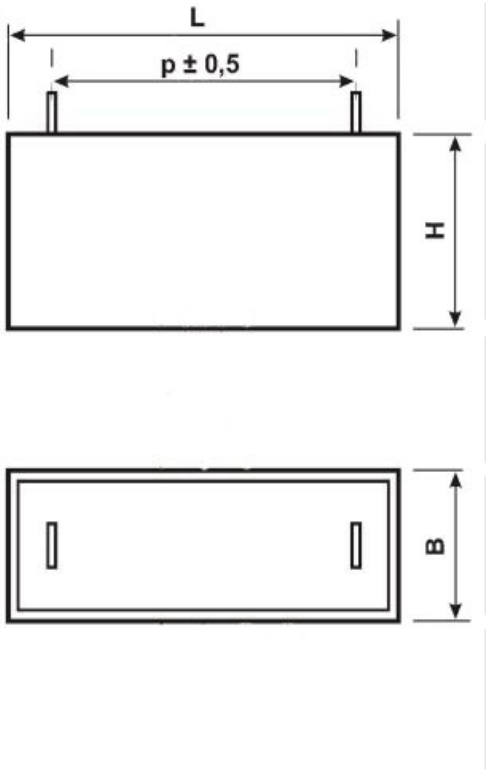
MKP 300-059 CAPACITORS FOR DC & AC APPLICATIONS



Capacit. C_R [µF]	Dimensions [mm]				
	B	H	L	p	P_L [W]
1,0	21	30	42,5	37,5	1,3
1,5	28	37	42,5	37,5	1,9
2,2	28	40	58	52,5	2,5
3,3	35	40	65	60	3,0
4,7	35	40	65	60	3,0
5,0	35	40	65	60	3,0
6,8	35	45	65	60	3,2

Construction:
Metallized electrodes, polypropylene film dielectricum,
Non-inductive, self-healing construction,
Plastic rectangular flame retardant case,
with bottom fastening foot available

Applications:
Smoothing, filtering and other DC applications
Also AC applications with low pulse loading

Technical data:
Rated voltage U_R: 2000V 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.

$$U_{MAX} = \sqrt{\frac{P_L}{2\pi \times f \times C_R \times tgD}}$$

Rated capacitance: 1,0 – 6,8µF
Tolerance: ±20%, ±10%,
Dissipation factor Tgδ: < 0,001 at 1kHz and +25°C
Insulation resistance R_{IS}: 10/C [GΩ; uF]
Operating temperature range: -40 ÷ +70°C
The highest permissible capacitor temperature at the hottest point of the case must not exceed +70°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: 2400VDC, 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:
1,1 x U_R max. 10% of the service period
If the Overvoltages exceed the permissible values above, the capacitor might have been destroyed.

Test voltage between terminals and case:
3000VDC, 1min. at +25°C
Max. repetitive rate of voltage rise dU/dt:
< 10V/µsec at U_R and +25°C
Max. peak current I_p: < C_R x dU/dt [A; uF, V/usec]
Terminals: solder tab terminals
Related standards: IEC 60384-1

Marking for purchase ordering:
MKP 300-059 4,7µF±10% 2000V DC

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.