# Elektronické součástky CZ, a.s.

## CAPACITORS FOR AC&HIGH PULSE APPLICATIONS MKP 300-195



### **Dimensions:**



| C <sub>R</sub> [μF] | Dimensions<br><sup>+1</sup> [mm] |    |    | dU/dt<br>V/us | I <sub>RMS</sub><br>[A] |
|---------------------|----------------------------------|----|----|---------------|-------------------------|
|                     | В                                | L  | H  |               |                         |
| 1,0                 | 65                               | 80 | 60 | 400           | 50                      |
| 1,5                 | 65                               | 80 | 60 | 400           | 60                      |
| 2,0                 | 65                               | 80 | 60 | 400           | 80                      |
| 3,0                 | 65                               | 80 | 60 | 350           | 85                      |
| 4,0                 | 65                               | 80 | 60 | 300           | 95                      |
| 5,0                 | 65                               | 80 | 60 | 200           | 100                     |
| 10                  |                                  |    |    |               |                         |
| 12                  |                                  |    |    |               |                         |

#### **Construction:**

Metalized film electrodes with internal series connection. Non-inductive, self-healing construction, The windings are enclosed in polyester tape. Self-extinguishing, UL94-V0

Mechanical fixing and electrical contact are made by threaded holes M8 on the cooling plates.

#### **Applications:**

The capacitors are suitable to withstand high peak current loading, high ripple current filtering, high frequency induction heating...

The construction minimizes the series inductance, have very low series resistance and good thermal dissipation of heat.

#### **Technical data**

**Rated voltage**  $U_R$ : 1500VDC, 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**  $U_{RMS}$  700V 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.

**Tolerance:**  $\pm 10\%$ , 5%, other tolerance on request **Dissipation factor Tg8:** < 0,0005 at 1kHz and +25°C **Insulation resistance R<sub>IS</sub>:** 30 000/C [MΩ] **Operating temperature range:** -40 ÷ +85°C

**Max permissible ambient temperature:** +70°C on case The highest permissible capacitor temperature at the hottest point of the case must not exceed +85°C. **Test voltage between terminals:** 

## 1800VDC, 2sec. at $+25^{\circ}$ C.

850V 50Hz, 2sec. 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.

## Non Recurrent Surge Voltage: UPK

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

**Max. peak current**  $I_p$ :  $< C_R x dU/dt$ 

I<sub>RMS</sub>: Min. value-see table, depends on the used cooling, Related standards: IEC 60384-1

## Marking for purchase ordering, sample:

MKP300-195 5µF±10% 1500V 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 datasheet.