# Elektronické součástky CZ, a.s.

## **KPI 500 – 078 HIGH VOLTAGE CAPACITORS**





С	Dimensions [mm]						PL
[ <b>uF</b> ]	D	L	L <sub>V</sub> max	р	m	d	[W]
0,5	55	95	20	35	M8x1 0	M4	12

### **Construction:**

Metal foil electrodes, polypropylene-film dielectricum, Non-inductive, self-healing construction Plastic cylindrical flame retardant case, with bottom

#### screw M8x10 Applications:

High voltage pulse applications, high frequency and high peak current applications, snubber applications. **Technical data** 

#### Rated voltage U<sub>R</sub>: 2500DC

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:** 900V 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.

$$U_{\text{MAX}} = \sqrt{\frac{P_{\text{L}}}{2\pi \times f \times C_{\text{R}} \times tgD}}$$

**Rated capacitance:** 0,5uF ÷ 1,0uF **Tolerance:** ±20%, ±10%, **Dissipation factor Tgδ:** < 0,001 at 1kHz and +25°C

**Dissipation factor 1go:** < 0,001 at 1kHz and  $+25^{\circ}$ C **Insulation resistance R<sub>IS</sub>:**  $>10\ 000M\Omega$ 

**Operating temperature range:**  $-40 \div +70^{\circ}$ C The highest permissible capacitor temperature at the hottest point of the case must not exceed  $+70^{\circ}$ C.

Max. permitted dissipation power of the capacitor  $P_L$ : depend on the construction and the cooling conditions, see table

Test voltage between terminals:  $1,2 \times U_R$ , 1min. at  $+25^{\circ}C$ , all capacitors are tested by the routine test by the producer

**Permitted overvoltages in working conditions:** 1,1 x  $U_R$  for 2 sec.

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: < 1000V/usec at  $U_R$  and +25°C Max. peak current  $I_p$ : <  $C_R \ge dU/dt$ 

Terminals: screws M4

Bottom-screw M10x15, or M10x20

Related standards: IEC 60384-1

Marking for purchase ordering:

KPI500-078 0,5uF 2500VDC

**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.