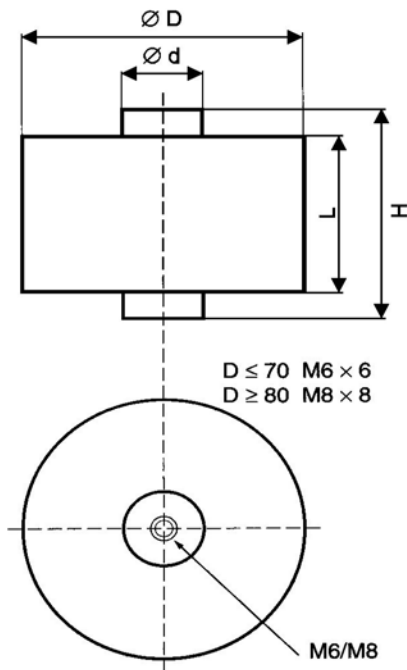


## CYLINDRICAL CAPACITORS FOR HIGH PULSE AND GTO APPLICATIONS

### KPI 306



#### Dimensions:



#### Construction:

Metal-foil/metallized film electrodes with internal series connection, polypropylene dielectric film, Non-inductive, self-healing construction, the windings are enclosed in a cylindrical plastic case, epoxy resin sealed, self-extinguishing, UL94-V0 Mechanical fixing and electrical contact are made by threaded holes M6 or M8 on the facing of the case.

#### Applications:

The capacitors are suitable to withstand high peak current loading as in protection of GTO, High ripple current filtering, high frequency induction heating... The axial construction minimize the series inductance, have very low series resistance and good thermal dissipation of heat.

#### Technical data

**Rated voltage  $U_R$**  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:** by 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  $Tg\delta$ :**  $< 0,0003$  at 1kHz and  $+25^\circ\text{C}$

**Insulation resistance  $R_{IS}$ :** 30 000/C [M $\Omega$ ]

**Operating temperature range:**  $-40 \div +85^\circ\text{C}$

**Max permissible ambient temperature:**  $+70^\circ\text{C}$  on case

The highest permissible capacitor temperature at the hottest point of the case must not exceed  $+85^\circ\text{C}$ .

**Test voltage between terminals:**

$1,6xU_R$ , 1min at  $+25^\circ\text{C}$

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:**  $U_{PK}$

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

**Test voltage between terminals and case:**

3000VDC, 1min. at  $+25^\circ\text{C}$

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

**Related standards:** IEC 60384-1

**Marking for purchase ordering, sample:**

MKP306  $1\mu\text{F} \pm 5\%$  1000V DC

$C_R$ [ $\mu\text{F}$ ]*	Type	$U_R$	$U_T$	$U_{RMS}$	Dimensions <sup>†1</sup> [mm]				dU/dt V/us	ESR [m $\Omega$ ]	$I_{RMS}$ [A]
		[V]	[V]	[V]	D	L	d	H			
1	KPI306	1000	1400	600	60	42	20	49	1000	<1,0	15
2	KPI306	1000	1400	600	60	42	20	49	1000	<1,0	25

\*Other capacitance on request

**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.