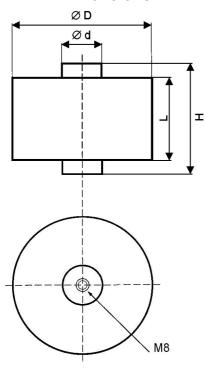
# Elektronické součástky CZ, a.s.

# CAPACITORS FOR HIGH PULSE AND HIGH FREQUENCY **APPLICATIONS**

# **KPI 311**



## **Dimensions:**



#### Construction:

Metal-foil electrodes, popypropylene dielectric internal series connection.

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 M8 on the facing of the case.

#### **Applications:**

The capacitors are suitable to withstand very high peak current loading as in protection of GTO, High ripple current, high frequency applications

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

#### Technical data

Rated voltage U<sub>R</sub> 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<sub>RMS</sub> at 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:** < 0.0004 at 1kHz and  $+25^{\circ}$ C **Insulation resistance R<sub>IS</sub>:** 30 000/C [MΩ] Operating temperature range:  $-40 \div +85^{\circ}$ 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:

Up for 10sec. 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.

### Surge Voltage: UP

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

Test voltage between terminals and case:

3000V50Hz, 1min. at +25°C

For M6 screw = 6 Nm, for M8 screw = 10 Nm

Related standards: IEC 60384 -1

Marking for purchase ordering, sample:

KPI311 3µF±5% 3400V DC

C <sub>R</sub> [μF]*	$U_{R}$	imensio	mensions <sup>+1</sup> [mm]			ESR		
	[V]		D	L	d	Н	[V/µsec]	$[m\Omega]$ at 100kHz
4,0	2500	3500	90	128	22	142 <sup>+0,5</sup>	>2500	<3,5
3,0	3400	4000	90	128	22	142 <sup>+0,5</sup>	>2500	<3,5

<sup>\*</sup>Other capacity 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, pleas, read carefully this technical data-sheet.