

# Special pulse capacitors

## KPI 300-012/2, KPI 300-012/3



### Construction:

Metallized polypropylene film, Non-inductive, self-healing construction. Plastic prismatic flame retardant case.

### Applications:

Snubber capacitors, all other AC and DC applications

### Technical data

#### Rated voltage $U_R$ : 1000 VDC

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:

If the working frequency is higher, the permissible AC voltage must be decreased, not to exceed the max. loss power of the capacitor.

$$\text{Max. } U_{AC(f)} = \sqrt{\frac{P_L}{2\pi f C_R \times \text{tg}\delta}}$$

#### Rated capacitance: 1 $\mu\text{F}$

Tolerance: 10%, 5%

Dissipation factor  $\text{Tg}\delta$ : < 0,001 at 1kHz and +25°C

Insulation resistance  $R_{i,s}$ : >10 000/C [M $\Omega$ ]

Operating temperature range: -55  $\div$  +85°C

The highest permissible capacitor temperature at the hottest point of the case must not exceed +85°C.

Max. permitted dissipation power of the capacitor  $P_L$ : depend on the cooling conditions 2,5W.

Test voltage between terminals: 1,25  $\times$   $U_R$ , 1min. at +25°C

All capacitors are tested by the routine test by the manufacturer

#### 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:

1,10  $\times$   $U_R$  max. 30% of the service period

1,15  $\times$   $U_R$  max. 30min./day

1,20  $\times$   $U_R$  max. 5min./day

1,30  $\times$   $U_R$  max. 1min./day

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 $dU/dt$ :

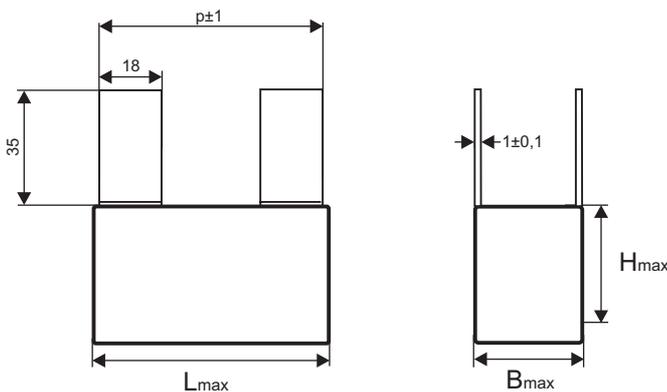
< 1000V/ $\mu\text{sec}$  at  $U_R$  and +25°C

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

Terminals: special

Related standards: IEC 60384-1, IEC 60384-17

Marking for purchase ordering: KPI 300-012/2  
 KPI 300-012/3



Provedení KPI 300-012/2



Provedení KPI 300-012/3



Capacit. $C_R$ [ $\mu\text{F}$ ]	$U_R$ [DC]	Dimension [mm]			
		B	H	L	p
1,0	1000	26,5	39	58	57,5

**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.