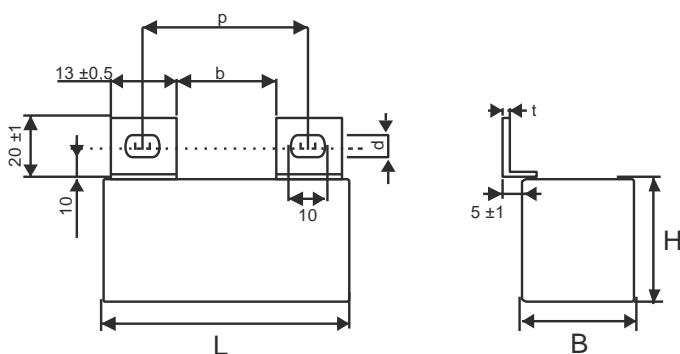


## KPI300-219 CAPACITORS FOR AC & PULSE APPLICATIONS



### Dimensions [mm]



Capacity $C_R$ [μF]*	Dimensions <sup>+1</sup> [mm]							ESR [mΩ]
	B	H	L	p	d	b	t	
4,7	50	45	75	37	8,2	24	1	3,0

\*Other Capacity on request

### Construction:

Double-side metallized electrodes, polypropylene film dielectric, non-inductive, self-healing construction, Plastic flame retardant case, epoxy resin sealed

### Applications:

AC applications with high peak and RMS current loading, high pulse loading, High dU/dt snubber applications. Directly mount to the IGBT module or across the Bus

### Technical data

**Rated voltage  $U_R$ :** 1000DC

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:** 400V 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.

$$U_{MAX} = \sqrt{\frac{P_L}{2\pi \times f \times C_R \times \text{tg}\delta}}$$

**Rated capacitance:** 4,7μF, other capacity on request

**Tolerance:** ±10%

other tolerance on request

**Dissipation factor  $\text{Tg}\delta$ :** < 0,0004 at 1kHz and +25°C

**ESL:** at resonant frequency and +25°C < 30nH

**Insulation resistance  $R_{IS}$ :** 30 000/°C [MΩ, uF]

**Operating temperature range:** -40 ÷ +85°C

The highest permissible capacitor temperature at the hottest point of the case must not exceed +70°C.

**Max . permitted dissipation power of the capacitor  $P_L$**  depend on the cooling conditions

**Test voltage between terminals:** 1600VDC, 2sec

at +25°C, All capacitors are tested by the routine test by the producer

### Protection against Over-voltages:

The capacitors are self-healing and regenerate themselves after occasional breakdowns. The capacitor remains fully functional after the breakdown.

### Permitted Over-voltages in working conditions:

1,1 x  $U_R$  max. 10% of the service period

If the Over-voltages 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:

< 35V/μsec at  $U_R$  and +25°C

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

**Related standards:** IEC 60384-1

### Marking for purchase ordering:

KPI300-219 4,7μF±10% 1000V DC

**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.