

CAPACITORS FOR AC & PULSE APPLICATIONS

KPST 345/250



Construction:

Metalized film 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, snubber applications. Directly mount to the IGBT module or across the Bus, **Technical data**

Rated voltage U_R: 250VDC

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: 160V 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.

$$U_{MAX} = \sqrt{\frac{P_L}{2\pi \times f \times C_R \times tgD}}$$

Capacitance	Dimensions ⁺¹ [mm]				
C _R [μF]*	В	Н	L	р	P __ [W]
3,3	21	30	42,5	18 ÷ 25	1,6
4,7	28	37	42,5	18 ÷ 25	2
6,8	28	37	42,5	18 ÷ 25	2
10	30	45	42,5	18 ÷ 25	2,5
15	30	45	42,5	18 ÷ 25	2,5
22	40	50	42,5	18 ÷ 25	3

*Other capacitances available on request

Rated capacitance: 3,3 ÷ 22 μ F

Tolerance: $\pm 20\%$, $\pm 10\%$, other tolerance on request Dissipation factor Tg δ : < 0,001 at 1kHz and +25°C ESR: at 100kHz and+25°C < m Ω

Insulation resistance R_{IS}: 30 000/C [MΩ]

Operating temperature range: $-40 \div +85^{\circ}$ C on case The highest permissible capacitor temperature at the hottest point of the case must not exceed +85°C. **Max . permitted dissipation power of the capacitor**

$\mathbf{P}_{\mathbf{L}}$: depend on the cooling conditions

Test voltage between terminals: 2000VDC, 2min 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. **Non Recurrent Surge Voltage:**

U_{PK} 400V

If the Over voltages exceed the permissible value above, the capacitor might have been destroyed. **Test voltage between terminals and case:** 2000VDC, 1min. at $+25^{\circ}C$

Max. repetitive rate of voltage rise dU/dt: < $25V/\mu$ sec at U_R and $+25^{\circ}C$ Max. peak current I_p: < C_R x dU/dt

Related standards: IEC 60384-1 Marking for purchase ordering: KPI345 15µF±10% 250V DC

Warning! The manufacturer is not responsible for any damages, caused by improper use or application. Before using the capacitor in any application, please, read carefully this technical data-sheet.