

Elektronické součástky CZ, a.s.

KPI 348 HF CAPACITORS FOR AC & PULSE APPLICATIONS



Construction:

Metal foil electrodes, polypropylene film dielectric, Non-inductive, self-healing construction, Plastic flame retardant case, epoxy resin sealed **Applications:**

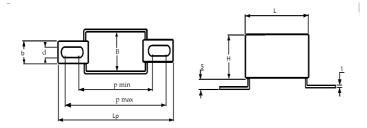
AC applications with high peak and RMS current loading, high pulse loading, High dU/dt snubber applications. Directly mount to the IGBT module or across the Bus, For using in induction heating suitable **Technical data**

Rated voltage U_R: 1200DC

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: 500V 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.

$$U_{\text{MAX}} = \sqrt{\frac{P_{L}}{2\pi \times f \times C_{R} \times tgD}}$$



b=18, Lp= 77,5⁺¹ d=6,5 Holes round or oval 6,2x10

Capacity	Dimensions ⁺¹ [mm]			
C _R [μF]*	В	H	L	р
0,01	22	30	42,5	57,5±1
0,025	22	30	42,5	57,5±1
0,033	22	30	42,5	57,5±1
0,1	22	30	42,5	57,5±1
0,15	28	37	42,5	57,5±1
0,25	28	37	42,5	57,5±1
0,5	30	45	42,5	57,5±1
1,0	40	50	42,5	57,5±1

^{*}Other Capacity on request

Rated capacitance: 0,01÷1µF

other capacity on request

Tolerance: $\pm 20\%$, $\pm 10\%$, other tolerance on request **Dissipation factor Tg8:** < 0,0004 at 1kHz and $\pm 25^{\circ}$ C

Tgδ: < 0,0005 at 10kHz and+25°C Insulation resistance R_{is} : 30 000/C [MΩ] Operating temperature range: -40 ÷ +70°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

 $\mathbf{P}_{\!L}$: depend on the construction of the capacitor and the cooling conditions

Test voltage between terminals: 2000VDC, 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:

 $1,1 \times U_R$ 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:

< $1200\text{V}/\mu\text{sec}$ at U_R and $+25^{\circ}\text{C}$ Max. peak current I_p : < C_R x dU/dt Related standards: IEC 60384-1 Marking for purchase ordering:

KPI348 HF 1µF±10% 1200V DC

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.