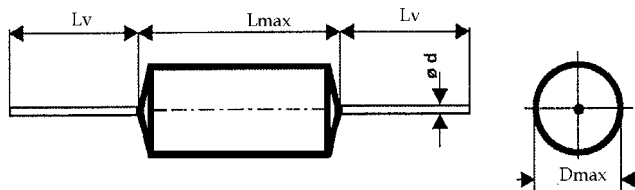
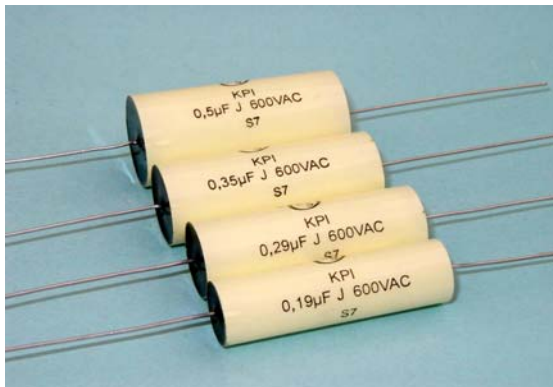




KPI 300 – 047 Capacitors for AC & Pulse applications



Construction:

Metal foil electrodes, polypropylene film dielectricum, Non-inductive, self-healing construction, Surface insulation: polyester film wrapped, epoxy resin sealed

Applications:

AC applications with high peak voltage and current loading. The capacitors are suitable for driving of stepping-motors

Technical data

Rated voltage U_R : 1000 VDC

Rated voltage is the max. DC or peak voltage, for which the capacitor is designed.

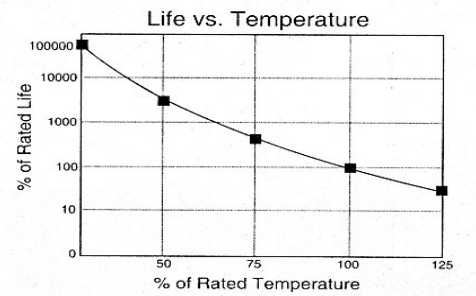
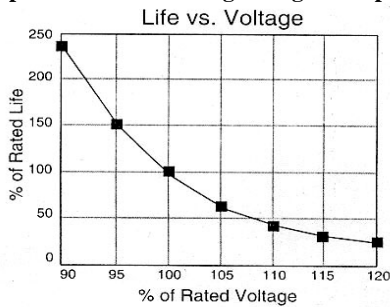
If the capacitor works with the DC and also super-imposed AC voltage U_{AC} , the sum of DC and the amplitude of AC must not exceed the U_R

Max permissible AC voltage: 600V 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.

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

Influence of temperature and working voltage on expected service-life



[µF]	Dimensions [mm]				Weight of capacitor [g]
	D	L	Lv	d	
0,05	10	30	40	0,8	4
0,1	12,5	30	40	0,8	6,0
0,15	16	30	40	0,8	8,5
0,165	16	30	40	0,8	9,0
0,19	18,5	30	40	0,8	9,0
0,19	11,5	40	40	0,8	6,2
0,22	19,8	30	40	0,8	11
0,22	12,5	40	40	0,8	7
0,29	14	40	40	0,8	9,2
0,33	24	30	40	0,8	13,5
0,33	15	40	40	0,8	9,8
0,35	17	40	40	0,8	10,6
0,47	19	40	40	0,8	14,5
0,5	23	40	40	0,8	14,8
0,56	24	40	40	0,8	16,5
0,68	25	40	40	0,8	19
1,0	31	40	40	0,8	26
1,0	25	60	40	0,8	26

Rated capacitance: 0,05 ÷ 1µF

Tolerance: ±10%, ±5%, other tolerance on request

Dissipation factor $\text{Tg}\delta$: < 0,001 at 1kHz 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.

Test voltage between terminals: 1250VDC, 1min, 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.

Permitted Overvoltages in working conditions:

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

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/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:

KPI300-047 165nF±10% 1000V DC/600VAC

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.