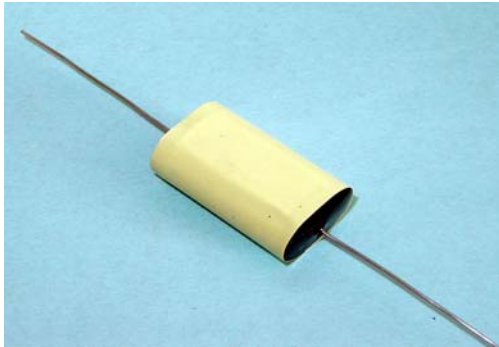
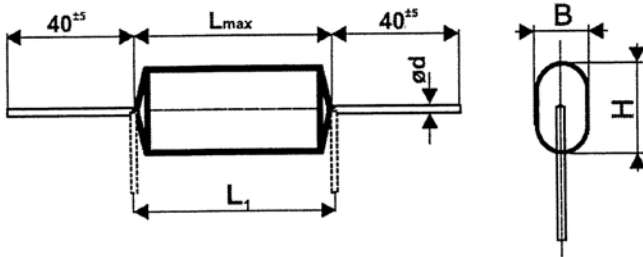


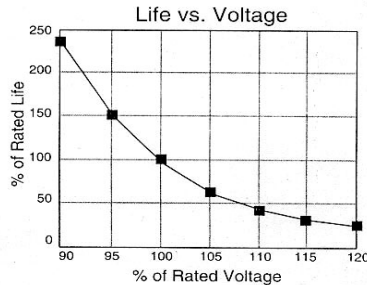
## KPI 300 – 047F Capacitors for AC & Pulse applications



INFO



### Influence of temperature and working voltage on expected service-life



### Construction:

Metal foil electrodes, polypropylene film dielectric, 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<sub>R</sub>:** 1000 VDC

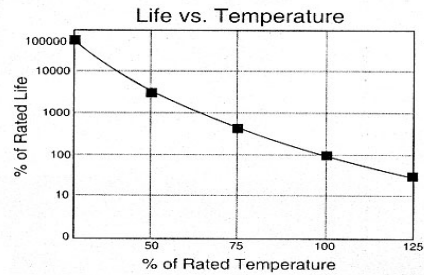
Rated voltage is the max. DC or peak voltage, for which the capacitor is designed.

If the capacitor works with the DC and also super-imposed AC voltage U<sub>AC</sub>, the sum of DC and the amplitude of AC must not exceed the U<sub>R</sub>

**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.

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



**Rated capacitance:** 0,1 ÷ 1µF

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

**Dissipation factor Tgδ:** < 0,001 at 1kHz and +25°C

**Insulation resistance R<sub>is</sub>:** 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, +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<sub>R</sub> 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:

< 1000V/µsec at U<sub>R</sub> and +25°C

**Max. peak current I<sub>p</sub>:** < C<sub>R</sub> x dU/dt

**Related standards:** IEC 60384-1

### Marking for purchase ordering:

KPI300-047F 290nF±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.

[µF]	Dimensions [mm]				Weight of capacitor [g]
	B	H	L <sup>+1</sup>	L <sub>V</sub>	
0,1	7,5	18	30	40	6,0
0,15	10,5	21	30	40	8,5
0,19	18	22	30	40	9,0
0,22	14	24	30	40	11
0,27	15	26	30	40	7
0,29	16	27	30	40	9,2
0,33	17,5	28	30	40	13,5
0,33	10	21	40	40	9,8
0,47	13,5	24	40	40	14,5
0,5	13,6	24,5	40	40	14,8
0,56	15	25,5	40	40	16,5
0,68	17,5	28	40	40	19
1,0	25	35	40	40	26
1,0	19	30	60	40	26