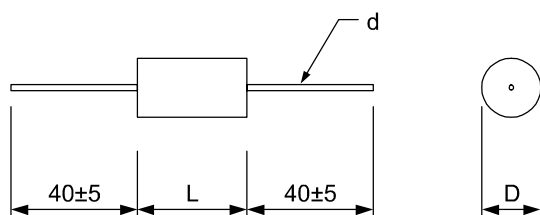


Polypropylene film capacitor KP - High pulse - Precision

Main applications: Blocking, bypassing, timing, LC/RC filters, high frequency coupling and decoupling, thermal compensation for ferrites.



Dielectric	Polypropylene		
Electrodes	Metal foils		
Coating	UL 510 / CSA TIL I-26 polyester tape wrapping; UL 94 V-0 resin end fill (flame retardant execution)		
Construction	Extended foil (refer to general technical information)		
Leads	Tinned copper wire		
Reference standard	IEC 60384/13, IEC 60068, CECC 30000, CECC 31800		
Climatic category	55/100/56 (IEC 60068/1), FMD (DIN40040)		
Operating temperature range	-55°...+105°C		
Rated capacitance (Cr)	100pF to 0,022μF, in compliance with IEC60063, E6 series. Refer to article table		
Capacitance tolerance (at 1kHz)	±10% (code=K), ±5% (code=J) and ±20% (code=M). Other tolerances up to ±1% (code=F) upon request		
Capacitance temperature coefficient	Refer to graphs in general technical information. -250 (±120)p.p.m./°C(Typical value)		
Long term stability (at 1kHz)	Capacitance variation ≤ ±0,5% after a period of 2 years at standard environmental conditions		
Rated voltage (Ur)	160, 250, 400 Vdc (Permissible AC voltage at 60Hz: 90, 125, 400 Vac)		
Category voltage (Uc)	Uc=Ur at +85°C; Uc=0,8xUr at +100°C		
Temperature derated voltage	For T> +85°C, Ur must be decreased 1,25% for every °C exceeding +85°C		
Self inductance	≤ 1nH/mm of capacitor and leads length used for connection		
Maximum pulse rise time	Refer to article table. The pulse characteristic Ko depends on the voltage waveform. In any case the value given in the article table must not be exceeded		
Dissipation factor (DF), max.	(tgδ x10 ⁻⁴ , measured at 25±5°C)		
	Freq.	Cr ≤ 1000pF	Cr > 1000pF
	10kHz	-	5
	100kHz	10	-
Insulation resistance (IR)	When measured between terminals, at 25±°C, after 1 minute of electrification at 100Vdc: IR ≥ 100GΩ .		
Test voltage between terminals (Ut)	2.0xUr (DC) applied for 2s at 25±5°C (1 minute for type test)		
Damp heat test (steady state)	Test conditions: Temperature= +40±2°C Relative humidity= 93±2% Test Duration= 56 days	Performance: Capacitance change ≤ ±2% DF change ≤ 0,0005 at 1kHz IR ≥ 50% of initial limit value	
Endurance test	Test conditions: Temperature= +85±2°C Test duration= 1000h Voltage applied= 1,5 x Ur(DC)	Performance: Capacitance change ≤ ±1% DF change ≤ 0,0005 at 10kHz IR ≥ 50% of initial limit value	
Resistance to soldering heat test	Test conditions: Solder bath temperature= +260±5°C Dipping time (with heat screen)= 10±1s	Performance: Capacitance change ≤ ±1% DF change ≤ 0,0005 at 1kHz IR ≥ 50% of limit value	



Dimensional tolerances (mm)

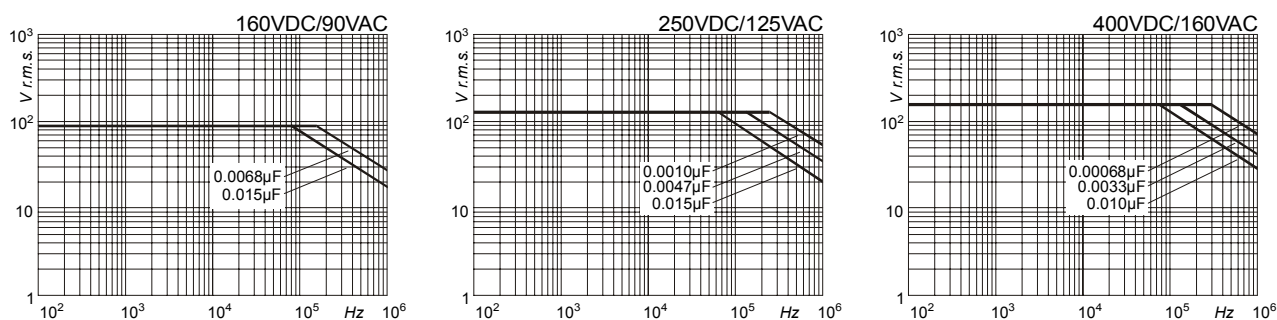
L	L±	D±
10,5	1,0	1,0
13,0	1,5	1,0

PW article table (different values available upon request)

Rated voltage Vdc	Vac	Cap. value (μF)	D	Dimension in mm L	d	du/dt V/μs	Ko V ² /μs	ICEL ordering code ⁽¹⁾
160	90	0,00330	5	10,5	0,6	2500	800E03	PW_1161330*A
160	90	0,00470	5,5	10,5	0,6	2500	800E03	PW_1161470*A
160	90	0,00680	6	10,5	0,6	2500	800E03	PW_1161680*A
160	90	0,01000	6	13	0,6	2200	704E03	PW_1162100*B
160	90	0,01500	6,5	13	0,6	2200	704E03	PW_1162150*B
160	90	0,02200	7,5	13	0,8	2200	704E03	PW_1162220*B
250	125	0,00150	4,5	10,5	0,6	5000	250E04	PW_1251150*A
250	125	0,00220	5	10,5	0,6	5000	250E04	PW_1251220*A
250	125	0,00330	6	10,5	0,6	5000	250E04	PW_1251330*A
250	125	0,00470	6	13	0,6	4500	225E04	PW_1251470*B
250	125	0,00680	6,5	13	0,6	4500	225E04	PW_1251680*B
250	125	0,01000	7,5	13	0,8	4500	225E04	PW_1252100*B
250	125	0,01500	8,5	13	0,8	4500	225E04	PW_1252150*B
400	160	0,00010	4,5	10,5	0,6	13000	104E05	PW_1400100*A
400	160	0,00015	4,5	10,5	0,6	13000	104E05	PW_1400150*A
400	160	0,00022	4,5	10,5	0,6	13000	104E05	PW_1400220*A
400	160	0,00033	4,5	10,5	0,6	13000	104E05	PW_1400330*A
400	160	0,00047	4,5	10,5	0,6	13000	104E05	PW_1400470*A
400	160	0,00068	4,5	10,5	0,6	13000	104E05	PW_1400680*A
400	160	0,00100	4,5	10,5	0,6	13000	104E05	PW_1401100*A
400	160	0,00150	5	10,5	0,6	13000	104E05	PW_1401150*A
400	160	0,00220	5	13	0,6	6500	520E04	PW_1401220*B
400	160	0,00330	6	13	0,6	6500	520E04	PW_1401330*B
400	160	0,00470	6,5	13	0,6	6500	520E04	PW_1401470*B
400	160	0,00680	7,5	13	0,8	6500	520E04	PW_1401680*B
400	160	0,01000	9	13	0,8	6500	520E04	PW_1402100*B

(1)Change the * symbol with the needed capacitance tolerance code: F=±1%, G=±2%, H=±2.5%, J=±5%, K=±10%, M=±20%

Permissible AC voltage versus frequency (sinusoidal waveform) for ΔT= +10°C



Warning

This specification must be completed with the data given in the
“General technical information” chapter