

# Specification

Part Name: Metallized Polypropylene Film Capacitor Axial Type

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Specification: CBB20: 502K6000VDC / +/-10% /MPT-501K6000VB

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## Features:

- Long life due to self-healing
- High Insulation Resistance
- Low Dissipation Factor and ESL
- Non-Inductive Construction
- High Dielectric Strength
- Very low loss in high frequency, suitable for high current.
- Small Inherent Temperature Rise
- White flame retardant tape and black epoxy fill
- Long straight tinned copper leads

## Common Applications:

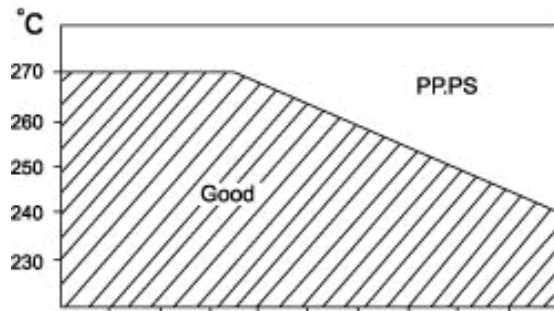
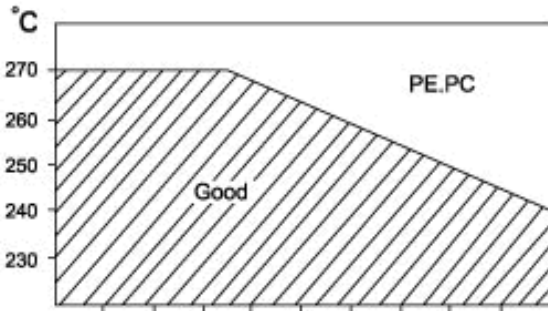
- Pulse Power Systems (X-ray machines / pulsed lasers / medical defibrillators).
- Audio and High Fidelity Equipment (loudspeaker crossover networks / amplifiers).
- TV and CRT Equipment (tube/valve television sets / monitors / color TV sets).
- Industrial and Scientific Instruments (test equipment / oscilloscopes).
- Lighting and Motor Control (motor starters / HID lighting ballasts).
- High Voltage Power Supplies and Filtering
- Power Systems (HV filtering / timing circuits / pulse operations).

Specifications		Outline
Citation specifications	GB/T3667-1 IEC60252-1	<p>501K6000V</p>
Climate categories	40/105/21	
Temperature range	-40°C~105°C	
Capacity	0.0005uF	
Capacity Tolerance	J(±5%), K(±10%)	
Rated Voltage	6000VDC	
Withstand Voltage	9000VDC (When the temperature is above 85°C but below 105°C, the rated voltage decreases by 1.25% UR°C)	
Loss Tangent	≤0.001 (20°C 1KHz)	
Insulation resistance IR (20°C 1Min)	$C_R \leq 0.33 \mu F \geq 10000M \Omega$	
	$C_R > 0.33 \mu F \geq 7500M \Omega / \mu F$	

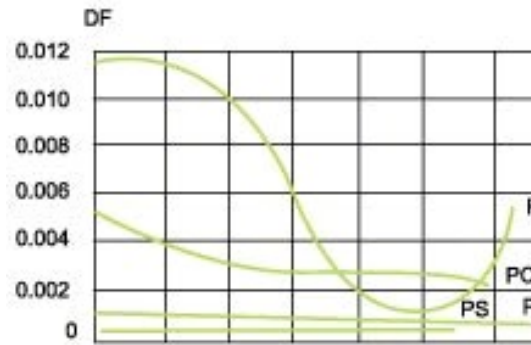
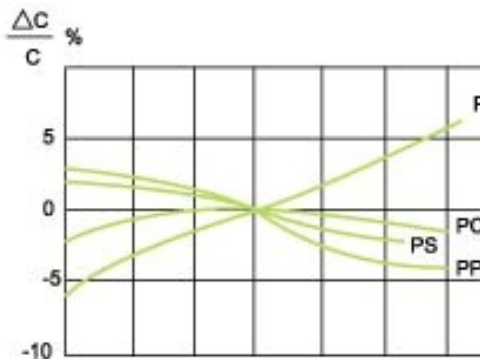
PN:	MPT-501K6000VB		
<b>Dimension (mm)</b>			
TYPE	W(Max-mm)	D(Max-mm)	Φ d(±0.05)
501K6000V	21	8.0	0.8CU
Note:	White flame-retardant PET tape, black epoxy potting.		

# Electrical Characteristics of Film Capacitor

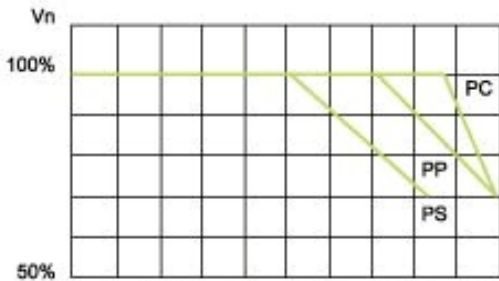
## 1. Soldering Temperature VS Time



## 2. Temperature Characteristic



## Capacitance vs. Temperature



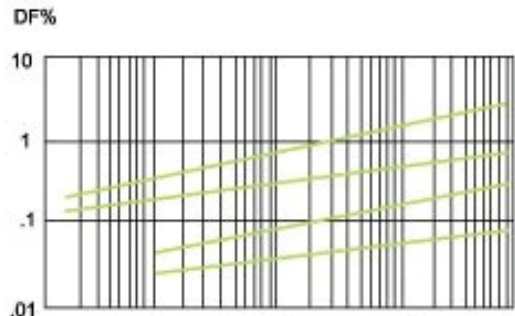
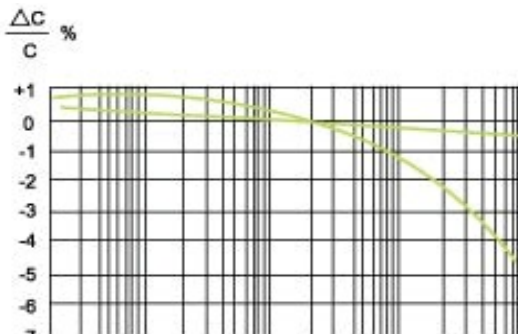
## Dissipation Factor vs. Temperature



## Operation voltage vs. Temperature

## (CR value) IR vs. Temperature

## 3. Frequency Characteristics



## Capacitance vs. Frequency

## Dissipation Factor vs. Frequency