

## POLYIMIDE FILM



Name: Polyimide film

### Specifications

Thickness	Width	Roll Diameter	Roll ID
20um~250um	6~1040mm	350mm	76mm(3" )
Note: Thickness Tolerance: $\pm 10\%$ Normal; width: 520/660/1040mm; Other specifications are customized			

### Property

Polyimide film is synthesized by polymerizing PMDA 4-formic acid-2-anhydride of benzene (PMDA) and 4,4-diamino-diphenyl-ether oxide (ODA) in strong polar solvents through the process of forming film and imine treatment at high temperature, which possess excellent performance of insulation and mechanism, Excellent chemical stability and flame retardant property and radiation resistance, irradiated with r ray of  $10^9$ , its properties unchanged. It perform with high and low temperature resistant :  $-269C(-452.2F) \sim +260C(+492F)$ , wide range of working temperature  $-60C$  to  $+250C$  for long time, and up to  $+400C$  for short time working without any modification in electrical and mechanical properties.

### Typical Physical Properties

Items		Units	Typical Values				
Thickness		$\mu m$	25	40	50	125	175
Tensile Strength	MD $\geq$	MPa	170	165	165	130	120
	TD $\geq$		165	160	140	110	110
Elongation at rupture $\geq$		%	50	50	50	60	60
Dielectric Strength	Average $\geq$	V/ $\mu m$	170	160	160	120	115
	Individual $\geq$		140	130	130	100	90
Shrinkage	150C	%	0.15				
	400C		2.0		1.8		
Surface Resistivity 200C		$\Omega$	$\geq 1.0 \times 10^{13}$				
Volume Resistivity 200C		$\Omega \cdot cm$	$\geq 1.0 \times 10^{10}$				
Dielectric Constant(50Hz)			3~4				
Loss Tangent(50Hz)			$\leq 4.0 \times 10^{-3}$				

- ◇ All above-mentioned techniques are the average values obtained after our several testing by acknowledged and reliable testing methods. For ensure the correct selection and using of our products, please make a thorough understanding both of the purposes and conditions on usage in advance, or notify us so as to provide you with further explanation and service.

### Applications

- ◇ Wrapping of electromagnetic wire and high-temperature cable
- ◇ Insulation for Slot liner, interlayer in Motor, transformer, capacitor
- ◇ Formed coil insulation of traction motors etc
- ◇ Backing material for pressure -sensitive adhesive tape; F46(FEP) tape
- ◇ Substrates or overlay of Flexible Printed Circuits Board. (F-PCB)
- ◇ Polyimide tube