

# Bi-axial Oriented Polyimide Film (BOPI Film)



## Property

BOPI film was made by Bi-axial process.

## Characteristics

- ✧ Excellent electrical insulation, high strength, homogenization in all aspects, etc.
- ✧ Maintains excellent mechanical stability in the range of temperatures from -270℃ to 250℃ with short-term run ability at the temperatures up to 400℃
- ✧ Low contraction, small thickness tolerance

## Specifications

Thickness	Width	Length (Roll)	Area Coefficient (g/M <sup>2</sup> )	Roll ID
13um	1040mm	3000m	18.2~18.5	76mm (3"),152mm(6")
25um	1040mm	1500m	35.0~35.5	76mm (3")
50um	1040mm	800m	70.0~71.0	76mm (3")
75um	1040mm	500m	105.0~106.5	76mm (3")
125um	1040mm	300m	175.0~177.5	76mm (3")

- ✧ Joint: ≤2/1000m

## Typical Physical Properties

Item	Units	Thickness	Typical Values	Testing Methods
Tensile Strength (MD/TD)	MPa	13μm	160/155	JB/2726-96
		25~75μm	165/160	
		125μm	160/165	
Elongation at Break	%	13~125μm	≥60	JB/2726-96
Dielectric Strength	MV/M	13~125μm	≥210	JB/2726-96
Surface Resistivity	Ω	13~125μm	≥1×10 <sup>13</sup>	JB/2726-96
Volume Resistivity	Ω.cm	13~125μm	≥1×10 <sup>15</sup>	JB/2726-96
Dielectric Constant 50 Hz	-----	13~125μm	3.2	JB/2726-96
Dissipation Factor 50Hz	-----	13~125μm	4×10 <sup>-3</sup>	JB/2726-96
Shrinkage 200℃ 30min	%	13-25μm	≤0.1	
		50~75μm	≤0.2	
		125μm	≤0.3	
Moisture Absorption	%		≤ 3	GB/T13541-92
Heat Weightless Temp	℃,5%		510	T.G.D(Air)
Flammability Grade			UL94-V0	

## Applications

- ✧ Flexible circuit board(FPC)
- ✧ Voice coil
- ✧ Base film of pressure-sensitive tape
- ✧ Electric insulating material