PEN Disk

PEN disk offers thermal stability, gas?barrier performance, and mechanical durability for capacitor dielectrics, optical storage, and rotational test components in precision systems. **SKU:** 1000018711-group
Product Code: ES36-FM-000150

Material Properties for Polymers

Chemical Resistance

Element	Value
Acids - concentrated	Good-Poor
Acids - dilute	Good
Alcohols	Good
Alkalis	Good
Aromatic hydrocarbons	Good
Greases and Oils	Good
Halogenated Hydrocarbons	Good
Ketones	Good

Mechanical Properties

Element	Value
Coefficient of friction	0.27- biax film
Elongation at break(%)	60- biax film
Tensile modulus(GPa)	5-5.5- biax film
Tensile strength(MPa)	200- biax film

Electrical Properties

Element	Value
Dielectric constant @1MHz	3.2@10KHz
Dissipation factor @ 1kHz	0.005
Dissipation factor @ 1MHz	0.0048@10KHz
Dielectric strength(kV mm?¹)	160@0.075mm
Surface resistivity(Ohm/sq)	10¹?
Volume resistivity(Ohmcm)	10¹?

Physical Properties

Element	Value
Flammability	VTM-2 - UL94, 0.075mm
Resistance to Ultra-violet	Fair
Optical transmission(%)	84@0.075mm
Water absorption(%)	0.4
Density(gcm?³)	1.36

Thermal Properties

Element	Value
Upper working temperature(C)	155
Thermal conductivity(W m?¹ K?¹)	0.15@23°C
Coefficient of thermal expansion(x10?? K?¹)	20-21- biax film