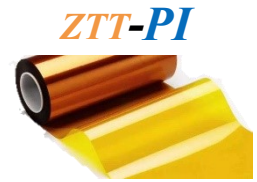


ZTT® ZI-H Polyimide film



DESCRIPTION

ZTT® ZI-H film is a general film material which has been specifically designed and manufactured for FCCL and FPC manufacturing. Benefit from advanced chemical imidization process, this particular film has excellent electrical, thermal, mechanical and corrosion resistance properties.

TYPICAL CHARACTERISTICS

↔ High elongation



High chemical resistance



High insulation

↖ ↗ Low thermal coefficient
of linear expansion



Low moisture absorption



Low shrinkage

APPLICATION



Base film



Cover layer



Stiffener

TYPICAL VALUES OF PROPERTIES

Property	Unit	Thickness (μm)				Test method	
		12.5	25	50	75		
Mechanical property	Ultimate Tensile Strength (20°C)	MPa	338	332	311	298	ASTM D 882
	Ultimate Elongation (20°C)	%	85	82	78	75	
	Tensile Modulus (20°C)	GPa	4.2	4.2	4.1	4.0	
Thermal property	Shrinkage (150°C/0.5h)	%	0.02	0.03	0.06	0.08	IPC TM 650 2.2.4A
	Thermal Coefficient of Linear Expansion (100-200°C)	ppm/°C	16	16	18	18	TMA Method
Electrical property	Volume Resistivity	Ω·cm	> 10 ¹⁶	> 10 ¹⁶	> 10 ¹⁶	> 10 ¹⁶	ASTM D 257
	Dielectric Strength	kV/mm	372	309	265	209	ASTM D 149
	Dielectric Constant (1MHz)	-	3.4	3.3	3.2	3.1	ASTM D 150
	Dissipation Factor (1MHz)	-	0.006	0.006	0.008	0.008	
Physical and chemical property	Moisture Absorption (20°C/24h)	%	1.6	1.6	1.7	1.8	ASTM D 570
	Density	g/cm ³	1.45	1.45	1.45	1.45	ASTM D 792

NOTE: The above values are typical test data. Please see the factory testing report for details.