

AWTVF-HTTP AeroWindTech Inc.'s **High Temperature Thermal Polyimide (HTTP)** film possesses an excellent balance of physical, thermal, electrical and chemical properties over a wide range of temperatures (-269°C [752°F]). More precise thickness control, superior web flatness, plus improved adhesion and excellent dimensional stability are standard features with **AWTVF-HTTP** polyimide films. This product is available up to 50" wide in a variety of mill thicknesses for critical temperature applications.

Polyimide base materials for FPC
 Wire and cable insulation
 Pressure sensitive tapes

Motor generator insulation
 Barcode label
 High temperature thermal applications

Thermal Properties

Items	Units	Typical Values	Conditions	Methods
Coefficient of Thermal Expansion	ppm/°C	32	100 to 200°C	TMA

Chemical Properties

Items	Units	Typical Values	Conditions	Methods
Water Absorption	%	2.9	D-24-20	ASTM D-570
Coefficient of Humidity Expansion	ppm/%RH	16	50°C	HMA

Mechanical Properties

Items	Units	Typical Values	Conditions	Methods
Tensile Strength MD & TD	MPa	245	20°C	ASTM D882
Tensile Modulus MD & TD	GPa	3.1	20°C	ASTM D882
Elongation MD & TD	%	115	20°C	ASTM D882

Electrical Properties

Items	Units	Typical Values	Conditions	Methods
Volume Resistivity	Ωcm	>10 ¹⁶	20°C	ASTM D-257
Dielectric Constant	-	3.3	20°C	IPCTM-650
Dielectric Breakdown Voltage	V/μm	320	20°C	ASTM D-149