

HF/FHF Polyimide-Fluorine-46 Composite Film

Product No.:MAF03

Q-MANTIC® Polyimide-Fluorine-46 Composite Film (HF,FHF) is made by dipping and coating F-46 emulsion on polyimide film then solidified at high temperature. Self-melt and the ability to seal under high temperature is these films' special properties. It also has the excellent characters in electric insulation, resistance to high temperature, radiation and corrosion as well as self-melting and seal under high temperature etc.

Remarks:

- FH Film: Single-side, FHF Film: Double-side
- Width: 10mm-550mm
- Base film thickness: 0.025-0.075mm
- F-46 layers thickness: 0.003-0.02mm

Features

- High Temperature electrical insulation
- Cut-through resistant
- High bond strength
- High dielectric strength



Characteristic

Similar as	120FN616	200FN919	300FN929	500FN131	150FN019	200FN011	300FN021	
Thickness µm(inch)	31(0.012)	50(0.002)	75(0.003)	125(0.005)	38(0.0015)	50(0.0002)	75(0.0003)	
Structure (µm)	FEP	3.0	7.5	12.5	12.5	12.5	15.0	15
	PI	25.0	35.0	50.0	100.0	25.0	35.0	60.0
	FEP	3.0	7.5	12.5	12.5	0	0	0
Thickness Tolerance (%)	±10							
Tensile Strength (MPa) ≥	MD	130	100	80	80	140	100	110
	TD	110	80	75	70	110	80	90
Elongation at rupture (%) ≥	50	50	50	50	50	60	60	
Breakdown Strength (MV/m) ≥	Average	150	120	120	110	150	120	110
	Individual	120	110	110	100	120	100	100
Peel Strength (N/25mm) ≥	F-F	6.0	6.5	6.7	6.7	N/A	N/A	N/A
	F-H	N/A	N/A	N/A	N/A	6.0	6.0	6.0
Surface Resistivity 200+/-5 °C (392F) (Ω)≥	1.0×10 ¹³							
Volume Resistivity 200+/-5 °C (392F) (Ω·m)≥	1.0×10 ¹⁰							
Dielectric constant (50Hz)	3.5±0.4							
Loss tangent (50Hz)≤	4.0 × 10 ⁻³							

Application

- Turn insulation in motors and generators
- Electrical insulation of flexible heater
- Wire and cable insulation

Packing

- Min. slitting width: 6mm
- Core ID: 3" / 6"
- Winding: Pad type/Step-pac Type/Universal Type
- Storage: Keep in room temperature. Remove package before use. Unused parts are wrapped in original packaging to avoid moisture absorption. It is recommended to be used up in 6 months.

