

Woven-glass PTFE

Being the raw materials of the woven-glass PTFE copper-clad substrate, the woven-glass PTFE is made up of non-alkali; woven-glass varnished with the dispersed PTFE emulsion by way of dying, baking and sintering processes. It is a kind of heat resisting, insulation, and low loss microwave material with good electrical performances, non-adhesive and high-temperature abilities. It is suitable to electronic, electrical machinery, aviation, textile, chemical and food industries. It can be also used in microwave circuit devices as the separating layer for multi-layer printed-circuit boards.

1. Types:

- a. F4B-N Ant adhesive Woven-glass PTFE
- b. F4B-J Insulation Woven-glass PTFE
- c. F4B-T Air Permeable Woven-glass PTFE

2. Technical Specifications:

a. Exterior Looks: Surface with well paleness and emulsion dispersed homogeneously without cracks and mechanical scars.

b. Dimensions: A(length)=1 ~ 50m B(width)=900mm ~ 1000mm

c. Thickness and Tolerance:

Type	Guards against sticks uses F4B-N				Insulation F4B-J			The ventilation guards against sticks the varnished cloth F4B-T	
	0.08	0.10	0.15	0.40	0.1	0.15	0.24	0.04	0.07
Thickness δ (mm)	±0.01	±0.02	±0.03	±0.04	±0.05	±0.01	±0.02	±0.004	±0.005

Mechanical, Physical, Chemical and Electrical Properties:

No.	Item	Test Conditions	Unit	Technical Specifications
1	Tensile Strength	Pulling Force Machine	Kg/cm ²	1000
2	Donating Temperature	In Back Oven	°C	250°C long-term operation 300°C operation with interruption
3	Chemical Temperature	Immersed in Acid Sal Alkali Liquid		All being inertial
4	Surface Resistant Coefficient	Under Atmospheric Temperature	Ω	$\geq 10^{12}$
5	Bulk Resistant Coefficient	Under Atmospheric Temperature	$\Omega \cdot \text{cm}$	$\geq 10^{13} \Omega \text{cm}$
6	Break down Voltage	$\delta=0.8$	KV	≥ 0.6
		$\delta=0.1$	KV	≥ 0.8
		$\delta=0.15$	KV	≥ 1.1
		$\delta=0.20$	KV	≥ 1.3
		$\delta=0.40$	KV	≥ 1.5
7	Dialectical Constant	1GHz	ϵ_r	2.7±0.1
8	Dialectical Loss Tangent	1GHz	tg δ	$\leq 2 \sim 5 \times 10^{-4}$