

## Metallic Teflon woven glass fabric copper-clad laminates F4B-1/Al(CU)

F4B-1/AL ( Cu ) is a kind of microwave circuit metal base material based on Teflon woven glass fabric copper-clad laminates , which is pressed with copper on one side、 and aluminum ( copper ) plate on the other side.

Technical Specifications :

Dimension ( mm )	300×300    400×400					
	For special dimension , customized laminates is available.					
Thickness Of metal base	Optional by the user.					
Warp	The specification meets the design requirement for base laminate.					
Electrical Property	Name	Test condition		Unit	Value	
	Density ( Dielectric layer )	Normal state		g/ cm <sup>3</sup>	2.2 ~ 2.3	
	Moisture Absorption	Dip in the distilled water of 20±2°C for 24 hours		%	≤0.02	
	Operating Temperature	High-low temperature chamber		°C	-50°C ~ +260°C	
	Thermal Conductivity ( Dielectric layer )			W/m/k	0.3~0.5	
	CTE			ppm/°C	Same to the F4BM-2	
	Shrinkage Factor	2 hours in boiling water		%	□ 0.0002	
	Surface Resistivity	500V	Normal state		M·Ω	≥1×10 <sup>4</sup>
		DC	Constant humidity and temperature			≥1×10 <sup>3</sup>
	Volume Resistivity	Normal state		MΩ.cm	≥1×10 <sup>6</sup>	
Constant humidity and temperature		≥1×10 <sup>5</sup>				

	Surface dielectric strength	Normal state	d=1mm ( Kv/mm )	≥1.2
		Constant humidity and temperature		≥1.1
	Dielectric Constant	10GHZ	εr	2.25 , 2.65 , 3.0 ( ±2% ) , 3.5
	Dissipation Factor	10GHZ	tgδ	≤1.5×10-3
	Thermal resistance	A	°C/W	≥2.0



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