

FJY294A PTFE fiber glass reinforced copper clad laminate

FJY294A is a special laminate made of PTFE resin and reinforced with fiber glass for RF/Microwave application. Considering quality stability as the top priority, we have been optimizing our laminate structure and production technique, now our laminate can meet all domestic and international standards while with very competitive production cost.

Our laminate is with excellent electric and PIM characteristics, low loss and low coefficient of thermal expansion, favorable mechanical and size stability, which become very competitive high frequency PCB base material in the market.

Product Feature:

- Low DK, stable at different temperature and frequency
- Low loss, stable at different temperature and frequency
- Excellent anti-peel off characteristics
- Favorable mechanical and size stability
- Good PIM performance, especially suitable for PTH design



Applications:

- Base station antennas and antennas for other application
- Microwave assemblies and modules
- Global positioning system
- Radar and other military application
- Wireless WIFI application



FJY294A Test Data Information

Dielectric Constant(10 GHz)	IPC TM-650 2.5.5.5	C24/23/50	2.94
Dissipation Factor(10 GHz)	IPC TM-650 2.5.5.5	C24/23/50	0.002
Thermal Coefficient of Er (ppm/°C)	IPC TM-650 2.5.5.5 Adapted	-10°C to +140°C	-100
Peel Strength (lbs/per inch, copper 1OZ)	IPC TM-650 2.4.8	After Thermal Stress	≥10
Volume Resistivity (MΩ-cm)	IPC TM-650 2.5.17.1	C96/35/90	1.2x10 ⁹
Surface Resistivity (MΩ)	IPC TM-650 2.5.17.1	C96/35/90	4.8x10 ⁷
Arc Resistance (second)	IPC TM-650 2.5.1	D48/50	>180
Bending Strength(N/mm2) longitudinal/transverse	IPC-TM-650 2.4.4	A, 23°C	95/85
Breakdown Voltage (kV)	ASTM D-149	D48/50	>35
Size Stability (ppm)	IPC TM-650 2.4.39	Etching+E4/105	-400, +400
Density (g/cm ³)	ASTM D-792 Method A	A, 23°C	2.20
Water Absorption the highest (%)	IPC TM-650 2.6.2.1	E1/105 + D24/23	0.2
T288 (min)	IPC TM-650 2.4.24.1	E2/105	
CTE (ppm/°C) X Axis Y Axis Z Axis	IPC TM-650 2.4.41	0°C to 150°C	18
			15
			130
Thermal Conductivity (W/mK)	ASTM E-1225	100°C	0.40
Flammability	UL 94	C48/23/50, E24/125	Meets requirements of UL94-V0

Standard Thickness of Laminate	Standard Size	Standard Copper Clad
0.005" (0.127 mm)	18"x12" (457x305mm)	Hoz(18um)
0.010" (0.254 mm)	18"x24" (457x612mm)	1oz(35um)
0.015" (0.381 mm)	18"x36" (457x915mm)	2oz(70um)
0.020" (0.508 mm)	18"x48" (457x1220mm)	Note: with low profile copper foil
0.030" (0.762 mm)	36"x48" (915x1220mm)	
0.060" (1.524 mm)	40"x48" (1016x1220mm)	
0.125" (3.175 mm)	42"x48" (1067x1220mm)	

*Thickness, Size can be customized.