

HJY980B-M hydrocarbon ceramic filled copper clad laminate

HJY980B-M is a special laminate made of hydrocarbon and filled with ceramic 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
- Easy for fabrication, FR-4 fabricating process applicable
- Favorable mechanical and size stability
- Good PIM performance, suitable for multilayer fabrication



Applications:

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



HJY980B-M Test Data Information

Dielectric Constant(10 GHz)	IPC TM-650 2.5.5.5	C24/23/50	9.8+/-0.03
Dissipation Factor(10 GHz)	IPC TM-650 2.5.5.5	C24/23/50	0.0021+/-15%
Thermal Coefficient of Er (ppm/°C)	IPC TM-650 2.5.5.5 Adapted	-55°C to +150°C	+45
Peel Strength (lbs/per inch, copper 1OZ)	IPC TM-650 2.4.8	After Thermal Stress	≥5
Volume Resistivity (MΩ-cm)	IPC TM-650 2.5.17.1	C96/35/90	2.2x10 ⁸
Surface Resistivity (MΩ)	IPC TM-650 2.5.17.1	C96/35/90	4.1x10 ⁸
Arc Resistance (second)	IPC TM-650 2.5.1	D48/50	>180
Bending Strength(N/mm ²) longitudinal/transverse	IPC-TM-650 2.4.4	A, 23°C	225/180
Size Stability (mm/m)	IPC TM-650 2.4.39	Etching+E2/150°C	<0.4
Density (g/cm ³)	ASTM D-792 Method A	A, 23°C	2.8
CTE (ppm/°C) X Axis Y Axis Z Axis	IPC TM-650 2.4.41	-55 °C to 288 °C	21
			18
			31
Thermal Conductivity (W/mK)	ASTM D5470	50 °C	0.61
Flammability	UL 94		Meets requirements of UL94-V0
Water Absorption the highest (%)	IPC TM-650 2.6.2.1	48/50	0.12
PIM	43dBm/1800M	50ohm/0.060"	<-158dBc

Standard Thickness of Laminate	Standard Size	Standard Copper Clad
0.010" (0.254 mm)	18"x12" (457x305mm)	Hoz(18um)
0.020" (0.508 mm)	18"x24" (457x612mm)	1oz(35um)
0.030" (0.762 mm)		2oz(70um)
0.060" (1.524 mm)		
0.120" (3.048 mm)		
Other		

*Thickness, Size can be customized.