



Synthane-Taylor Laminates

FB-650S High Performance Copper Clad G-10/FR-4 Laminates Multifunctional Epoxy

A high-reliability laminate, FB-650S is designed for use in mechanical and electrical applications. Performance characteristics include:

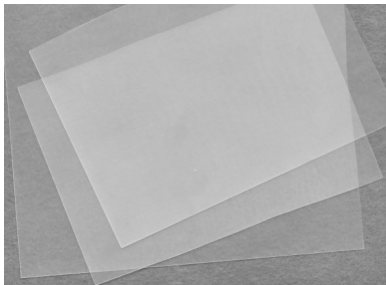
- Glass transition temperature (Tg) 130°C
- Natural (translucent white) color
- Excellent inner-laminar bond strength
- Exceptional clarity and cleanliness
- High chemical and moisture resistance
- Superior thermal shock resistance
- UL rated 94-V0
- Process using standard FR-4 parameters
- Provides for excellent drilling and machining characteristics
- Excellent substitute for G-10 materials
- Cost point lower than other FR-4 materials
- Unclad materials available .0020" to 0.187" standard

FB-650S meets and/or exceeds all requirements of IPC-4101/21. Our material is manufactured to Class "A" surface quality and Class B/L thickness tolerance as standard.

FB-650S meets and/or exceeds all requirements of Mil-I-24768/27. Special requirements are available upon request.

RoHS Compliance Statement

This Material is ROHS and WEEE compliant, containing no regulated substances. Flame retardant is TBBA fully reacted into the epoxy backbone



Properties Tested

Values Obtained

Properties Tested	Values Obtained	
	Under .030" Over.030"	
Peel Strength, lbs-per-inch width 1 oz/ft ² Copper		
As Received	8.0	8.5
After thermal stress	8.0	8.0
Volume Resistivity		
minimum in megohm-centimeter		
After moisture resistance	1X10 ⁶	1X10 ⁶
At elevated temperature	1X10 ³	1X10 ³
Surface Resistivity		
minimum in megohm-centimeter		
After moisture resistance	1X10 ⁴	1X10 ⁴
At elevated temperature	1X10 ³	1X10 ³
Permittivity at 1 MHz max. (Dielectric Constant)	4.6	4.8
Loss Tangent at 1 MHz max. (Dissipation Factor)	0.018	0.020
Flammability (UL-94)	V-0	V-0
Glass Transition Temperature (Tg), D.S.C. Method	130°C	130°C