FJY220A 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
<table>
<thead>
<tr>
<th>Property</th>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dielectric Constant (10 GHz)</td>
<td>IPC TM-650 2.5.5.5</td>
<td>C24/23/50, 2.20</td>
</tr>
<tr>
<td>Dissipation Factor (10 GHz)</td>
<td>IPC TM-650 2.5.5.5</td>
<td>C24/23/50, 0.0009</td>
</tr>
<tr>
<td>Thermal Coefficient of Er (ppm/°C)</td>
<td>IPC TM-650 2.5.5.5 Adapted</td>
<td>-10°C to +140°C, -135</td>
</tr>
<tr>
<td>Peel Strength (lbs/per inch, copper 1OZ)</td>
<td>IPC TM-650 2.4.8</td>
<td>After Thermal Stress, ≥10</td>
</tr>
<tr>
<td>Volume Resistivity (MΩ·cm)</td>
<td>IPC TM-650 2.5.17.1</td>
<td>C96/35/90, 1.4x10^9</td>
</tr>
<tr>
<td>Surface Resistivity (MΩ)</td>
<td>IPC TM-650 2.5.17.1</td>
<td>C96/35/90, 3.0x10^7</td>
</tr>
<tr>
<td>Are Resistance (second)</td>
<td>IPC TM-650 2.5.1</td>
<td>D48/50, &gt;180</td>
</tr>
<tr>
<td>Bending Strength (N/mm2) longitudinal/transverse</td>
<td>IPC-TM-650 2.4.4</td>
<td>A, 23°C, 95/85</td>
</tr>
<tr>
<td>Breakdown Voltage (kV)</td>
<td>ASTM D-149</td>
<td>D48/50, &gt;35</td>
</tr>
<tr>
<td>Size Stability (ppm)</td>
<td>IPC TM-650 2.4.39</td>
<td>Etching+E4/105, -600, +600</td>
</tr>
<tr>
<td>Density (g/cm³)</td>
<td>ASTM D-792 Method A</td>
<td>A, 23°C, 2.20</td>
</tr>
<tr>
<td>Water Absorption the highest (%)</td>
<td>IPC TM-650 2.6.2.1</td>
<td>E1/105 + D24/23, 0.2</td>
</tr>
<tr>
<td>T288 (min)</td>
<td>IPC TM-650 2.4.24.1</td>
<td>E2/105</td>
</tr>
<tr>
<td>CTE (ppm/°C)</td>
<td>IPC TM-650 2.4.41</td>
<td>0°C to 150°C, 22/35/245</td>
</tr>
<tr>
<td>Thermal Conductivity (W/mK)</td>
<td>ASTM E-1225</td>
<td>100°C, 0.30</td>
</tr>
<tr>
<td>Flammability</td>
<td>UL 94</td>
<td>C48/23/50, E24/125, Meets requirements of UL94-V0</td>
</tr>
</tbody>
</table>

**Standard Thickness of Laminate**

<table>
<thead>
<tr>
<th>Thickness</th>
<th>Size</th>
<th>Cladding</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.005&quot; (0.127 mm)</td>
<td>18&quot;x12&quot; (457x305mm)</td>
<td>Hoz(18um)</td>
</tr>
<tr>
<td>0.010&quot; (0.254 mm)</td>
<td>18&quot;x24&quot; (457x612mm)</td>
<td>1oz(35um)</td>
</tr>
<tr>
<td>0.015&quot; (0.381 mm)</td>
<td>18&quot;x36&quot; (457x915mm)</td>
<td>2oz(70um)</td>
</tr>
<tr>
<td>0.020&quot; (0.508 mm)</td>
<td>18&quot;x48&quot; (457x1220mm)</td>
<td></td>
</tr>
<tr>
<td>0.030&quot; (0.762 mm)</td>
<td>36&quot;x48&quot; (915x1220mm)</td>
<td>Note: with low profile copper foil</td>
</tr>
<tr>
<td>0.037&quot; (0.940 mm)</td>
<td>40&quot;x48&quot; (1016x1220mm)</td>
<td></td>
</tr>
<tr>
<td>0.125&quot; (3.175 mm)</td>
<td>42&quot;x48&quot; (1067x1220mm)</td>
<td></td>
</tr>
</tbody>
</table>

*Thicknens, Size can be customized.*