

TFUER-T321

Phenolic Paper Laminates



DESCRIPTION

Tfuer-T321 also known as phenolic paper-based laminate, is a composite material made by impregnating layers of paper with a phenolic resin and then compressing them under high pressure and heat. This process results in a rigid, durable material with excellent mechanical and electrical properties. It is widely used in industrial and electrical applications.

Thickness: 3 mm ~ 50 mm.

Dimension: 1020 x 2040 mm, 1220 x 2480 mm.

KEY FEATURES

1. High Mechanical Strength
2. Electrical Insulation
3. Heat Resistance
4. Chemical Resistance
5. Lightweight



APPLICATION

1. **Electrical Insulators:** Used in switches, relays, and transformers.
2. **Printed Circuit Boards (PCBs):** As a substrate for simpler PCBs.
3. **Machined Parts:** Custom components in industrial machinery.
4. **Handles and Spacers:** Found in tools and appliances.
5. **Decorative Panels:** In applications requiring aesthetic finishes with durability.

BENEFITS

1. Cost-effective compared to other high-performance laminates.
2. Easy to machine and fabricate.
3. Versatile for a range of industrial applications.

Specification Data Sheet	Method	Unit	T321
Density	ISO 1183 / A	g/cm ³	1.4~1.5
Water absorption	ISO 62	mg	205
Flexural strength	ISO 178	MPA	140
Flexural modulus of elasticity	ISO 178	MPA	9000
Tensile strength	ISO 527	MPA	120
Compressive strength perpendicular	ISO 604	MPA	300
Impact strength (Charpy) parallel	ISO 179/3C	MPA	13
Electric strength perpendicular	IEC 60243-1 (90°C in oil)	KV/mm	5
Breakdown voltage parallel	IEC 60243-1 (90°C in oil)	KV	15
Insulation resistance after immersion	IEC 60167 (in water)	MOhm	220
Comparative tracking index CTI	IEC 60112	CTI	120
Thermal endurance	IEC 60216	°C	130
Color			Orange,Black

All information provided is based on the results of experiments conducted with the utmost care in our laboratories. However, it remains the user's responsibility to conduct additional tests to confirm the material's suitability for specific applications and ensure successful processing and usage.

RoHS Declaration: This material complies with the requirements of the EU Directive 2011/65/EU (RoHS). It does not contain any substances of very high concern (SVHC) as specified in Article 4, Paragraph 1 of the directive.