



TU-622-5

Core: TU-622-5

Prepreg: TU-62P-5

TU-622-5/ TU-62P-5 laminate/ prepreg are made of high quality woven E-glass coated with the epoxy resin system, which provides the laminates with UV-block characteristic, and compatibility with automated optical inspection (AOI) process. TU-62P-5 is designed for use with TU-622-5 following standard processing conditions to make FR-4 thin-core multilayer printed circuit boards..

Performance and Processing Advantages

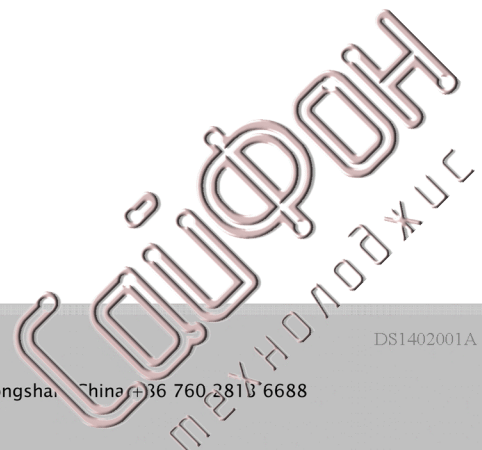
- Cost effective way to meet the higher Tg requirement
- Use friendly FR-4 processing conditions such as oxide, press, drilling and desmear
- Chemical and thermal resistance property
- Superior dimensional stability, thickness uniformity and flatness
- Fluorescence for AOI
- Optical characteristics provide UV-block property
- High interlayer bonding strength with optimum resin flow
- Superior dielectric thickness control
- Wide processing window for maximum lamination performance

Industry Approvals

- IPC-4101 Type Designation : /21
- UL Designation – ANSI Grade: FR-4.0
- UL File Number: E189572
- Flammability Rating: 94V-0
- Maximum Operating Temperature: 130°C

Standard Availability

- Thickness: 0.002"[0.05mm] to 0.062"[1.58mm], available in sheet or panel form
- Copper Foil Cladding: 1/3 to 5oz (HTE) for built-up; 1/3 to 12oz (HTE) for double sides and H to 2oz (MLS)
- Prepregs: Available in roll or panel form
- Glass Styles: 106, 1080, 2113, 2116, 1506 and 7628 etc.





Typical Properties for TU-622-5 Laminate			
	Typical Values	Test Condition	SPEC
Thermal			
Tg (DMA) Tg (DSC) Tg (TMA) Td (TGA)	155 °C 145 °C 135 °C 310 °C	E-2/105+des	N/A
CTE x-axis CTE y-axis CTE z-axis	14~18 ppm/°C 14~18 ppm/°C 4.1 %	Ambient to Tg 50 to 260°C	N/A N/A N/A
Thermal Stress, Solder Float, 288°C	> 60 sec	A	> 10 sec
T-260	> 20 min	E-2/105+des	N/A
Flammability	94V-0	E-24/125+des	94V-0
Electrical			
Permittivity (RC50%) 1 MHz 1 GHz	4.5 4.2	C-24/23/50	< 5.4 N/A
Loss Tangent (RC50%) 1 MHz 1 GHz	0.016 0.015	C-24/23/50	< 0.035 N/A
Volume Resistivity	> 10 ¹⁰ MΩ·cm	C-96/35/90	> 10 ⁹ MΩ·cm
Surface Resistivity	> 10 ⁸ MΩ	C-96/35/90	> 10 ⁴ MΩ
Mechanical			
Flexural Strength Lengthwise Crosswise	> 80,000 psi > 70,000 psi	A A	> 60,000 psi > 50,000 psi
Peel Strength, 1.0 oz. Cu foil	9~12 lb/in	A	> 4 lb/in
Bow and Twist 0.020"~0.031" 0.032"~0.065" >0.066"	< 0.8% < 0.8% < 0.8%	A	Max 1.5 Max 1.0 Max 1.0
Dimensional Stability	< 0.03%	E-4/105+E-2/150	< 0.03 %
Water Absorption	0.18 %	E-1/105+des+D-24/23	< 0.8 %

NOTE:

- Property values are for information purposes only and not intended for specification.
- Any sales of these products will be governed by the terms and conditions of the agreement under which they are sold.

