

# G-T1300

## **PTFE High Frequency Copper-Clad-Laminate**



### **Product Overview**

GT1300 laminate is a product of special enforcement by glass fibre composed with PTFE; it is a kind of circuit board material which can carry out a lot of information processing under UHF (GHz). Good performance stability with its low Dk and Df.Good for mechanical operation, better electronic performance stability. Microwave includes planar and non-planar structure, such as antenna, complex multilayer circuit, interlayer connection and microwave circuit for the design of aerospace.

#### **Main Features**

- Excellent High Frequency Performance
- Antenna Positioning Systems
- Adapt To Complex Multilayer High Frequency
- Wireless Communication System
- Excellent Electrical Performance and Machining Performance

## **Technical Specifications**

Specifications Laminates				
standard thickness	standard size	standard copper foil		
0.005" (0.127mm)	48 X 36 (1220mm*914mm)	½ oz. (18µm) HTE (H/H)		
0.010" (0.254mm)	24 X 18 (610mm*457mm)	1 oz. (18μm) HTE (H/H)		
0.025" (0.635mm)	18 X 12 (457mm*305mm)	½ oz. (18µm) RTF (H/H)		
0.050" (1.270mm)		1 oz. (35μm) RTF (1/1)		

Test Performan				<u>, , , , , , , , , , , , , , , , , , , </u>	
Performance T	Typical Value	Directio	Unit	Treatment	Test
	GT1300	n		Condition	Method
DK	3.0±0.05	Z	-	10 GHz/23°C	IPC-TM-650 2.5.5.5
DF	0.002				
	0.003	Z	-	10 GHz/23℃	IPC-TM-650 2.5.5.5
Temperature coefficient of Dk	-25	Z	ppm/°C	-50 150°C	IPC-TM-650 2.5.5.5
Volume Resistivity	1.9*107	XY	MΩ*cm	COND A	IPC-TM-650 2.5.17.1
Surface Resistivity	2.5*107		ΜΩ	COND A	IPC-TM-650 2.5.17.Q
Tensile	Tensile 182		Mpa(kpsi)	RT	ASTM D638
Strength	26				
Bending Strength	263		Mpa(kpsi)		IPC-TM-650 2.4.4
	37				
Dimensional Stability	<0.5		mm/m		IPC-TM-650 2.4.39A
CTE	17/17/28	X/Y/Z	ppm/°C	-55 288℃	IPC-TM-650 2.4.41
TD	500				ASTM D3850
Thermal Conductivty	0.5	-	W/m/K	80°C	ASTM C518
Water Absorptio	<0.10		%	D24/23	ASTM D570
Density	2.1		gm/cm3	23°C	ASTM D792
Typical Peel Strength	>1.4		N/mm	H oz	IPC-TM-650 2.4.8
Flammability Rating	V-0				UL 94
Lead-Free Process Compatible	Yes				

#### **For More Information**

Please visit our website:  $\underline{\text{http://www.gospell.com}} \text{ or contact your local sales representative:}$ 

#### **GONTCERA Global Sales Center**

Addr.: GOSPELL Industrial Park, Guanshandong Street, Suxian District, Chenzhou, Hunan Province, China

TEL: +86-735-2666666-8636 Mobile: +86-18073548780 FAX: 86-0735-2659922 E\_mail: <u>dengwl@gospell.com</u>

