



# Synamic 6N

## Ultra Low Loss & Heat Resistance Multilayer PCB Material

### FEATURES

- High Tg and high Td
- Excellent thermal reliability
- Excellent anti-CAF performance
- Low Dk/Df (@10GHz): 3.35/0.0021
- Lower Z-axis CTE, offering superior PTH reliability

### APPLICATIONS

Ultra high speed network equipment,  
Server, Switch, Storage, Routers and BBU of  
Base station, High performance computing,  
High frequency measuring instruments,  
Optical communication products

### GENERAL PROPERTIES

Test Items	Test Method	Test Condition	Unit	Typical Value
Tg	IPC-TM-650 2.4.24.4	DMA	°C	205
	IPC-TM-650 2.4.25D	DSC		185
Td	IPC-TM-650 2.4.24.6	5% wt. loss	°C	402
T288	IPC-TM-650 2.4.24.1	TMA	min	> 120
T300	IPC-TM-650 2.4.24.1	TMA	min	> 60
Thermal Stress	IPC-TM-650 2.4.13.1	288°C, solder dip	-	Pass
CTE (Z-axis)	IPC-TM-650 2.4.24	Before Tg	ppm/°C	50
	IPC-TM-650 2.4.24	After Tg	ppm/°C	210
	IPC-TM-650 2.4.24	50-260°C	%	2.0
Dielectric Constant	IPC-TM-650 2.5.5.9	C-24/23/50, 1GHz	-	3.41
	IPC-TM-650 2.5.5.5	C-24/23/50, 10GHz	-	3.35
	IEC61189-2-721	C-24/23/50, 10GHz	-	3.52
Dissipation Factor	IPC-TM-650 2.5.5.9	C-24/23/50, 1GHz	-	0.0013
	IPC-TM-650 2.5.5.5	C-24/23/50, 10GHz	-	0.0021
	IEC61189-2-721	C-24/23/50, 10GHz	-	0.0026
Peel Strength (1oz)	IPC-TM-650 2.4.8	288°C/10s	N/mm [lb/in]	0.82 [4.68]
Water Absorption	IPC-TM-650 2.6.2.1	D-24/23	%	0.10
Flammability	UL94	C-48/23/50	Rating	V-0

Remarks: 1. All the typical value is based on the 0.76mm (6\*2116) thickness specimen, but not guarantee data.

2. All the typical value listed above is for your reference only, please turn to Shengyi Technology Co., Ltd. for detailed information, and all rights from this data sheet are reserved by Shengyi Technology Co., Ltd.