



# Synamic8GN

(No ANSI) Halogen-free Ultra-low Loss & Heat Resistance Multilayer PCB Material

## FEATURES

- Low Dk/Df (10GHz): 3.28/0.0019
- High Tg (DMA): 205°C
- Excellent thermal reliability
- Excellent anti-CAF performance
- Lower Z-axis CTE, offering superior PTH reliability

## APPLICATIONS

- Ultra-high speed network equipment
- Server, switch, storage, routers
- 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	TMA		190
Td		IPC-TM-650 2.4.24.6	TGA (5%wt loss)	°C	430
T300		IPC-TM-650 2.4.24.1	TMA	min	>120
X/Y-CTE		IPC-TM-650 2.4.24	TMA(50~125°C)	ppm/°C	12/12
Thermal Stress		IPC-TM-650 2.4.13.1	288°C, Solder dipping	-	Pass
CTE (Z-axis)		IPC-TM-650 2.4.24	Before Tg	ppm/°C	35
		IPC-TM-650 2.4.24	After Tg	ppm/°C	200
		IPC-TM-650 2.4.24	50-260°C	%	1.8
Dielectric Constant (Dk)	1GHz	IPC-TM-650 2.5.5.9	C-24/23/50	-	3.35
	10GHz	IPC-TM-650 2.5.5.5	C-24/23/50	-	3.28
	10GHz	IEC 61189-2-721	C-24/23/50	-	3.49
Dissipation Factor (Df)	1GHz	IPC-TM-650 2.5.5.9	C-24/23/50	-	0.0008
	10GHz	IPC-TM-650 2.5.5.5	C-24/23/50	-	0.0019
	10GHz	IEC 61189-2-721	C-24/23/50	-	0.0021
Peel Strength (1oz, RTF2/HVLP2)		IPC-TM-650 2.4.8	288°C/10s	N/mm [lb/in]	0.82/0.80 [4.7/4.6]
Water Absorption		IPC-TM-650 2.6.2.1	D-24/23	%	0.08
Flammability		UL94	C-48/23/50	Rating	V-0

Remarks:

1. All the typical value is based on the 30mil (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.