



# Synamic8G

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

## FEATURES

- Low Dk/Df (10GHz): 3.66/0.0032
- High Tg (DMA): 200°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	200
Td	IPC-TM-650 2.4.24.6	TGA (5% wt. loss)	°C	430
T288	IPC-TM-650 2.4.24.1	TMA	min	>120
T300	IPC-TM-650 2.4.24.1	TMA	min	>120
Thermal Stress	IPC-TM-650 2.4.13.1	288°C, solder dip	-	Pass
Z-CTE (2116 RC54%)	IPC-TM-650 2.4.24	Before Tg	ppm/°C	45
	IPC-TM-650 2.4.24	After Tg	ppm/°C	230
	IPC-TM-650 2.4.24	50-260°C	%	2.2
Permittivity	1GHz IPC-TM-650 2.5.5.9	C-24/23/50	-	3.62
	10GHz IPC-TM-650 2.5.5.5	C-24/23/50	-	3.66
	10GHz IEC61189-2-721	C-24/23/50	-	3.98
Loss Tangent	1GHz IPC-TM-650 2.5.5.9	C-24/23/50	-	0.0015
	10GHz IPC-TM-650 2.5.5.5	C-24/23/50	-	0.0032
	10GHz IEC61189-2-721	C-24/23/50	-	0.0040
Peel Strength (1oz, RTF2)	IPC-TM-650 2.4.8	288°C/10s	N/mm [lb/in]	0.82 [4.7]
Water Absorption	IPC-TM-650 2.6.2.1	D-24/23	%	0.10
Flammability	UL94	C-48/23/50	Rating	V-0 (HF)

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.