



Synamic 6B(F) (Dk 3.5)

RF Used Bonding Prepreg

FEATURES

- High Tg and high Td
- Tailored Dk 3.5 bonding prepreg for RF multilayer no need for high temperature lamination and extra-long curing
- Good resin flow
- UL94 V-0 flame rating

APPLICATIONS

- Cellular base station antennas
- Antenna feed networks
- Telemetry
- DAS & CPE antenna
- Massive MIMO antenna

GENERAL PROPERTIES

Test Items	Test Method	Test Condition	Unit	Typical Value
Tg	IPC-TM-650 2.4.24.4	DMA	°C	210
	IPC-TM-650 2.4.25D	DSC		190
Td	IPC-TM-650 2.4.24.6	5% wt. loss	°C	405
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	56
	IPC-TM-650 2.4.24	After Tg	ppm/°C	232
	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	-	3.54
	IPC-TM-650 2.5.5.5	C-24/23/50, 10GHz	-	3.56
	IEC61189-2-721	C-24/23/50, 10GHz	-	3.87
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	-	0.0036
	IEC61189-2-721	C-24/23/50, 10GHz	-	0.0046
Peel Strength (1oz)	IPC-TM-650 2.4.8	288°C/10s	N/mm [lb/in]	0.85 [4.86]
Water Absorption	IPC-TM-650 2.6.2.1	D-24/23	%	0.09
Flammability	UL94	C-48/23/50	Rating	V-0

Remarks:

1. All the typical value is based on the 0.714mm (7*3313 RC55%) 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.

Product Specification

Product	Thickness (mil)	Thickness (mm)	Dk					Df				
			1GHz	3GHz	5GHz	10GHz	15GHz	1GHz	3GHz	5GHz	10GHz	15GHz
Synamic 6B(F) (3313 RC55%)	4.0	0.102	3.56	3.56	3.56	3.56	3.55	0.0027	0.0030	0.0033	0.0036	0.0039

Remarks: Dk/Df test method: IPC TM-650 2.5.5.5