

Recyclad1G

Degradable & Recyclable, Halogen-free, Mid-Tg

FEATURES

- Degradable &Recyclable
- Lead-free compatible
- Halogen, antimony and red phosphorous free

APPLICATIONS

Tablet, NB, LED
Smartphone
Game machine
Automotive electronics
Communication equipment

GENERAL PROPERTIES

Test Items		Test Method	Test Condition	Unit	Typical Value
Tg		IPC-TM-650 2.4.25D	DSC	°C	153
Td		IPC-TM-650 2.4.24.6	TGA (5% W.L)	°C	370
T288		IPC-TM-650 2.4.24.1	TMA	min	>60
T260		IPC-TM-650 2.4.24.1	TMA	min	>60
Thermal Stress		IPC-TM-650 2.4.13.1	288°C/10s	times	>10
CTE (Z-axis)		IPC-TM-650 2.4.24	Before Tg	ppm/°C	35
		IPC-TM-650 2.4.24	After Tg	ppm/°C	240
		IPC-TM-650 2.4.24	50-260°C	%	2.8
Permittivity (Dk, R/C:56%)	1GHz	IPC-TM-650 2.5.5.9	C-24/23/50	-	4.5
Loss Tangent (Df, R/C:56%)	1GHz	IPC-TM-650 2.5.5.9	C-24/23/50	-	0.010
Volume Resistivity		IPC-TM-650 2.5.17.1	C-96/35/90	MΩ-cm	8.18E+09
Surface Resistivity		IPC-TM-650 2.5.17.1	C-96/35/90	ΜΩ	2.13E+09
Peel Strength (1oz)		IPC-TM-650 2.4.8	288°C/10s	N/mm [lb/in]	1.3 [7.42]
Water Absorption		IPC-TM-650 2.6.2.1	D-24/23	%	0.10
Flammability		UL94	C-48/23/50	Rating	V-0
Halogen Content	Br	EN 14582	A	ppm	≤900
	CI				≤900
	Br+Cl				≤1500
CTI		IEC 60112	A	Grade	PLC 1

Remarks: 1. Specification sheet: IPC-4101/128, is for your reference only.

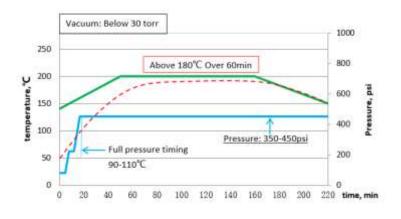
- 2. Permittivity (Dk) and Loss Tangent (Df) is tested with the 1.0 mm (8×2116) specimen.
- 3. Other typical value is based on the 1.6 mm (8×7628) specimen.
- 4. All the typical value listed above is for your reference only, please turn to Shengyi Technology Co., Ltd for detailed information, and all rights from this data sheet are reserved by Shengyi Technology Co., Ltd.



Recyclad1GB PREPREG

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HOT PRESSING CYCLE



- Heat up rate: 1.5-3.0°C/min (80-140°C).
- Curing time: >60min (180~190°C).
- Full pressure timing: product temperature 90-110°C.
- The hot pressing parameter is for your reference only, please turn to Shengyi Technology Co., Ltd for detailed information.

STORAGE CONDITION

- 3 months when stored at $< 23 ^{\circ}$ C and $< 50 ^{\circ}$ RH.
- 6 months when stored at $<5^{\circ}$ C. Normalize in room temperature for at least 4h before using.
- Beware of moisture, always keep wrapped in damp-proof material. Keeping in normal condition,
 prepreg might absorb moisture and its bonding strength would be weakened.