



# S1000H

(UL ANSI: FR-4.0) High Performance, Mid-Tg, Lead-free

## FEATURES

- Anti-CAF capability
- Lead-free compatible
- Low water absorption
- Excellent thermal reliability
- Excellent through-hole reliability.

## APPLICATIONS

Instruments  
 Computer and NB  
 Consumer electronics  
 Automotive electronics  
 Power supplier and Industrial

## GENERAL PROPERTIES

Test Items	Test Method	Test Condition	Unit	Typical Value
Tg	IPC-TM-650 2.4.24.4	DMA	°C	160
	IPC-TM-650 2.4.25D	DSC		155
Td	IPC-TM-650 2.4.24.6	TGA (5% W.L)	°C	348
T288	IPC-TM-650 2.4.24.1	TMA	min	20
T260	IPC-TM-650 2.4.24.1	TMA	min	>60
Thermal Stress	IPC-TM-650 2.4.13.1	288°C, solder dip	s	>100
CTE (Z-axis)	IPC-TM-650 2.4.24	Before Tg	ppm/°C	37
	IPC-TM-650 2.4.24	After Tg	ppm/°C	230
	IPC-TM-650 2.4.24	50-260°C	%	2.8
Permittivity (1GHz)	IPC-TM-650 2.5.5.9	C-24/23/50	-	4.6
Loss Tangent (1GHz)	IPC-TM-650 2.5.5.9	C-24/23/50	-	0.011
Volume Resistivity	IPC-TM-650 2.5.17.1	C-96/35/90	MΩ-cm	1.5×10 <sup>8</sup>
Surface Resistivity	IPC-TM-650 2.5.17.1	C-96/35/90	MΩ	3.5×10 <sup>7</sup>
Arc Resistance	IPC-TM-650 2.5.1	D-48/50+D-0.5/23	s	150
Dielectric Breakdown	IPC-TM-650 2.5.6	D-48/50+D-0.5/23	kV	>45
Peel Strength (1oz)	IPC-TM-650 2.4.8	288°C/10s	N/mm [lb/in]	1.3 [7.43]
Flexural Strength (LW/CW)	IPC-TM-650 2.4.4	A	Mpa	530/440
Water Absorption	IPC-TM-650 2.6.2.1	D-24/23	%	0.09
Flammability	UL94	C-48/23/50	Rating	V-0
CTI	IEC60112	A	Rating	PLC 3

- Remarks:
1. Specification sheet: IPC-4101/99, is for your reference only.
  2. All the typical value is based on the 1.6mm (8\*7628) specimen.
  3. 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.



# S1000HB PREPREG

(UL ANSI: FR-4.0) Bonding Prepreg For S1000H

## PREPREG PARAMETERS

Glass fabric type	Resin content (%)	Cured thickness (mm)	Standard size (Roll type)
106/1037	73	0.050	1.260m×150m
	78	0.063	
1080/1078	65	0.072	1.260m×300m
	68	0.081	
	70	0.087	
2313	57	0.100	1.260m×250m
2116	55	0.120	
	58	0.130	
1506	48	0.160	1.260m×150m
7628	46	0.195	
	48	0.205	
	50	0.215	
	52	0.225	

Other type, resin content and size could be available upon request.

## HOT PRESSING CYCLE

- The heat-up rate depends on the inner copper or the structure of multilayer PCB.
- Curing time: >45min (180~190℃).
- If you need any more detail information, please turn to Shengyi Technology Co., Ltd.

## STORAGE CONDITION

- 3 months when stored at < 23℃ and <50% RH.
- 6 months when stored at <5℃. 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.
- Avoid UV-rays and strong light.

## PURCHASING INFORMATION

Thickness	Copper foil	Standard size
0.05mm to 3.2mm	12um to 105 um	1,020mm ×1,220mm(40"×48") 915mm ×1,220mm(36"×48")
		1,070mm ×1,220mm(42"×48")

Remarks: Other sheet size and thickness could be available upon request.