

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	
To	IPC-TM-650 2.4.24.2	DMA	°C	160	
Tg	IPC-TM-650 2.4.25D	DSC		155	
Td	IPC-TM-650 2.4.24.6	TGA (5% W.L)	$^{\circ}$ 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℃, solder dip	S	>100	
CTE (Z-axis)	IPC-TM-650 2.4.24	Before Tg	ppm/℃	37	
	IPC-TM-650 2.4.24	After Tg	ppm/℃	230	
	IPC-TM-650 2.4.24	50-260℃	%	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 ⁸		
Surface Resistivity	IPC-TM-650 2.5.17.1	C-96/35/90	MΩ 3.5×10 ⁷		
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℃/10s	N/mm [lb/in] 1.3 [7.43]		
Flexural Strength (LW/CW)	IPC-TM-650 2.4.4	A	Мра	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	1.260may/200ma	
	68	0.081		
	70	0.087	1.260m×300m	
2313	57	0.100		
2116	55	0.120	- 1.260m×250m	
	58	0.130		
1506	48	0.160		
7628	46	0.195		
	48	0.205	1.260m×150m	
	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 \sim 190 $^{\circ}$ C).
- If you need any more detail information, please turn to Shengyi Technology Co., Ltd.

STORAGE CONDITION

- 3 months when stored at $< 23^{\circ}$ C and $<50^{\circ}$ RH.
- 6 months when stored at <5 °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.
- 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.