



# S1600L

(UL ANSI: FR-4.0) High CTI, Multilayer

## FEATURES

High CTI  
Anti-CAF capability  
Excellent through-hole reliability

## APPLICATIONS

PDP, LCD, TV  
Refrigerator  
Power supplier  
Washing machine  
Automotive electronics

## GENERAL PROPERTIES

Test Items	Test Method	Test Condition	Unit	Typical Value
Tg	IPC-TM-650 2.4.25D	DSC		150
	IPC-TM-650 2.4.24.4	DMA		155
Td	IPC-TM-650 2.4.24.6	TGA (5% W.L)		355
T288	IPC-TM-650 2.4.24.1	TMA	min	27
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	>60
CTE (Z-axis)	IPC-TM-650 2.4.24	Before Tg	ppm/	45
	IPC-TM-650 2.4.24	After Tg	ppm/	240
	IPC-TM-650 2.4.24	50-260°C	%	3.2
Permittivity (1GHz)	IPC-TM-650 2.5.5.9	C-24/23/50	-	5.0
Loss Tangent (1GHz)	IPC-TM-650 2.5.5.9	C-24/23/50	-	0.014
Volume Resistivity	IPC-TM-650 2.5.17.1	C-96/35/90	M -cm	2.1×10 <sup>8</sup>
Surface Resistivity	IPC-TM-650 2.5.17.1	C-96/35/90	M	3.2×10 <sup>7</sup>
Arc Resistance	IPC-TM-650 2.5.1	D-48/50+D-0.5/23	s	151
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]	1.5 [8.57]
Flexural Strength (LW/CW)	IPC-TM-650 2.4.4	A	Mpa	540/470
Water Absorption	IPC-TM-650 2.6.2.1	D-24/23	%	0.15
Flammability	UL94	C-48/23/50	Rating	V-0
CTI	IEC60112	A	Rating	PLC 0 (≥600V)

- Remarks: 1. Specification sheet: IPC-4101/101, is for your reference only.  
2. All the typical value is based on the 1.6mm (8\*7628) specimen.  
3. Thin core thickness less than 0.80mm may not satisfy CTI≥600V due to thickness or structure.  
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.



# S1600LB PREPREG

(UL ANSI: FR-4.0) Bonding Prepreg For S1600L

## PREPREG PARAMETERS

Glass fabric type	Resin content (%)	Cured thickness (mm)	Standard size (Roll type)
7628	46	0.190	1.260m×150m
	48	0.200	
	50	0.210	
2116	52	0.110	1.260m×250m
	55	0.120	
	58	0.130	

Other type, resin content and size could be available upon request, and some other prepreg types such as 106, 1080, 2116 RC < 54%, 7628 RC < 46% may not satisfy CTI ≥ 600V, please turn to Shengyi Technology Co., Ltd for detailed information.

## HOT PRESSING CYCLE

- The heat-up rate depends on the inner copper or the structure of multilayer PCB.
- Curing time: >60min (185~195 ).
- 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.

## PURCHASING INFORMATION

Thickness	Copper foil	Standard size
0.075mm 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.