

# 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

# **GENERAL PROPERTIES**

Test Items	Test Method	Test Condition	Unit	Typical Value
Ta	IPC-TM-650 2.4.25D	DSC	$^{\circ}$ C	150
Tg	IPC-TM-650 2.4.24.4	DMA	$^{\circ}\!\mathbb{C}$	155
Td	IPC-TM-650 2.4.24.6	TGA (5% W.L)	$^{\circ}$ C	355
T288	IPC-TM-650 2.4.24.1	TMA	min	27
T260	IPC-TM-650 2.4.24.1 TMA min		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/°C	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	olume Resistivity IPC-TM-650 2.5.17.1 C		MΩ-cm	2.1×10 <sup>8</sup>
Surface Resistivity	rface Resistivity IPC-TM-650 2.5.17.1 C-96/35/9		ΜΩ	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	Α	Мра	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
СТІ	CTI IEC60112		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. 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)
	46	0.190	
7628	48	0.200	1 <b>.260m×</b> 150m
	50	0.210	
	52	0.110	
2116	55	0.120	1.260m×250m
	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 < 52%, 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 $\sim$ 195 $^{\circ}$ 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  $<5^{\circ}$ 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.

### **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.