



# S1141 150

(UL ANSI: FR-4.0) Conventional FR-4

## FEATURES

- DICY cured laminate
- UV Blocking/AOI Compatible
- Excellent mechanical process ability

## APPLICATIONS

Computer, Instrumentation, VCR  
 Communication equipment  
 Game machine, automotive electronics  
 Not suitable for >2oz heavy copper, HDI,  
 and ≥12L application.  
 For applications with CAF requirements,  
 recommend customer to carry a systematic  
 assessment of its reliability.

## GENERAL PROPERTIES

Test Items	Test Method	Test Condition	Unit	Typical Value
Tg	IPC-TM-650 2.4.25D	DSC	°C	150
Td	IPC-TM-650 2.4.24.6	TGA (5% W.L)	°C	310
T260	IPC-TM-650 2.4.24.1	TMA	min	15
T288	IPC-TM-650 2.4.24.1	TMA	min	2
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	65
	IPC-TM-650 2.4.24	After Tg	ppm/°C	300
	IPC-TM-650 2.4.24	50-260°C	%	4.2
Permittivity (1GHz)	IPC-TM-650 2.5.5.9	C-24/23/50	-	4.2
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	MΩ-cm	4.7×10 <sup>8</sup>
Surface Resistivity	IPC-TM-650 2.5.17.1	C-96/35/90	MΩ	5.3×10 <sup>7</sup>
Arc Resistance	IPC-TM-650 2.5.1	D-48/50+D-0.5/23	s	120
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]	1.8 [10.28]
Flexural Strength (LW/CW)	IPC-TM-650 2.4.4	A	MPa	600/500
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 3

- Remarks:
1. Specification sheet: IPC-4101/21, 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.



# S0401 150 PREPREG

(UL ANSI: FR-4.0) Bonding Prepreg For S1141 150

## PREPREG PARAMETERS

Glass fabric type	Resin content (%)	Cured thickness (mm)	Standard size (Roll type)
106	74	0.050	1.260m×150m
1080	64	0.076	1.260m×300m
2116	52	0.120	1.260m×250m
7628	43	0.195	1.260m×150m

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 (170~180℃).
- 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 70 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.