

S1141

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

FEATURES

- DICY cured
- UV Blocking/AOI Compatible
- Excellent mechanical process ability
- Not suitable for Anti-CAF application

APPLICATIONS

Computer, Instrumentation, VCR, Communication equipment, electronics, Game machine, automotive electronics, Aviation, and etc. Not suggested for >2oz copper、HDI、 and ≥12L application

GENERAL PROPERTIES

Test Items	Test Method	Test Condition	Unit	Typical Value
Tg	IPC-TM-650 2.4.25D	DSC	$^{\circ}$	140
Td	IPC-TM-650 2.4.24.6	TGA (5% W.L)	$^{\circ}$ C	310
T288	IPC-TM-650 2.4.24.1	TMA	min	2
T260	IPC-TM-650 2.4.24.1	TMA	min	15
Thermal Stress	IPC-TM-650 2.4.13.1	288°C, solder dip	S	>60
	IPC-TM-650 2.4.24	Before Tg	ppm/℃	65
CTE (Z-axis)	IPC-TM-650 2.4.24	After Tg	ppm/℃	300
	IPC-TM-650 2.4.24	50-260℃	%	4.5
Permittivity (1GHz)	IPC-TM-650 2.5.5.9	C-24/23/50	-	4.4
Loss Tangent (1GHz)	IPC-TM-650 2.5.5.9	C-24/23/50	-	0.013
Volume Resistivity	IPC-TM-650 2.5.17.1	C-96/35/90	MΩ-cm	5.2×10 ⁸
Surface Resistivity	IPC-TM-650 2.5.17.1	C-96/35/90	ΜΩ	5.4×10 ⁷
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	Мра	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	Α	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 PREPREG

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

PREPREG PARAMETERS

Tomas	Resin content	Cured thickness	Standard size	
Туре	(%)	(mm)	(Roll type)	
106/1037	71	0.050		
	74	0.057	1.260m×150m	
	76	0.062		
1080/1078	64	0.078		
	68	0.090		
2313/3313	55	0.100	1.260m×300m	
2116	52	0.120	1.200111×300111	
	55	0.129		
	58	0.140		
1506	42	0.148	1 260,000 (150,000	
	45	0.160	1.260m×150m	
7628	43	0.195	1.260m×150m	
	45	0.205		
	48	0.220		
	50	0.230		

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: >30min (170 \sim 180 $^{\circ}$ 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.
- 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.