



S1141

(UL ANSI:FR-4.0)UV Blocking

FEATURES

- Tg140℃ (DSC).
- UV Blocking/AOI Compatible.
- Excellent mechanical processability.

APPLICATIONS

Computer, Instrumentation, VCR, communication equipment, electronic game machine, automotive electronics, aviation, and etc.

Not suitable for Anti-CAF application.
Not suitable for >2oz heavy copper, HDI and ≥12L high layer count application

GENERAL PROPERTIES

Test Item	Treatment Condition	Unit	Property Data		
			SPEC	Typical Value	
Tg	DSC	℃	≥130	140	
Flammability	C-48/23/50	-	V-0	V-0	
	E-24/125				
Volume Resistivity	After moisture resistance	MΩ-cm	≥10 ⁶	5.2×10 ⁶ ^a	
	E-24/125		≥10 ³	5.2×10 ⁶	
Surface Resistivity	After moisture resistance	MΩ	≥10 ⁴	5.4×10 ⁷	
	E-24/125		≥10 ³	5.6×10 ⁶	
Arc Resistance	D-48/50+D-0.5/23	S	≥60	120	
Dielectric Breakdown	D-48/50+D-0.5/23	KV	≥40	60	
Dielectric Constant (1MHz)	C-24/23/50	-	≤5.4	4.6	
Dissipation Factor (1MHz)	C-24/23/50	-	≤0.035	0.015	
Thermal Stress	Unetched	288℃, solder dip	-	>10s	60s
	Etched			No delamination	No delamination
Peel Strength	1oz	288℃, 10s	N/mm	≥1.05	1.8
	Cu. Foil	125℃		≥0.70	1.6
Flexural Strength	LW	A	MPa	≥415	600
	CW			≥345	500
Water Absorption	D-24/23	%	≤0.80	0.15	
CTE Z-axis	Before Tg	TMA	μm/m℃	-	65
	After Tg	TMA	μm/m℃	-	300
	50~260℃	TMA	%	-	4.5
Td	10℃/min, N ₂ , 5% Wt Loss	℃	-	310	
T260	TMA	min	-	15	
T288	TMA	min	-	2	
CTI	IEC60112 Method	V	PLC 3(175V--249V)	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 specimen, while the Tg is for specimen ≥0.50mm.
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.

Explanations: C = Humidity conditioning; D = Immersion conditioning in distilled water; E = Temperature conditioning.

The figures following the letter symbols indicate with the first digit the duration of the preconditioning in hours, with the second digit the preconditioning temperature in ℃ and with the third digit the relative humidity.



S0401 PREPREG

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

PREPREG PARAMETERS

Glass fabric type	Resin content(%)	Cured thickness(mm)	DK(1GHz)	Df(1GHz)	Standard size (Roll type)
106/1037	71	0.050	3.7	0.019	1.260m X150m
	74	0.057	3.6	0.020	
	76	0.062	3.6	0.020	
1080/1078	64	0.078	3.9	0.018	1.260m X300m
	68	0.090	3.7	0.019	
2313/3313	55	0.100	4.1	0.016	
2116	50	0.114	4.2	0.015	1.260m X250m
	52	0.120	4.2	0.015	
	55	0.129	4.1	0.016	
	58	0.140	4.0	0.016	
1506	42	0.148	4.4	0.013	1.260m X150m
	45	0.160	4.3	0.013	
	48	0.172	4.3	0.014	
7628	43	0.195	4.4	0.013	1.260m X150m
	45	0.205	4.3	0.013	
	48	0.220	4.3	0.014	
	50	0.230	4.2	0.015	

Remark: DK and Df are tested according to IPC TM-650 2.5.5.9

Prepreg type, resin content and size could be available upon request.

PURCHASING INFORMATION

Thickness	Copper foil	Standard Size	
0.05mm to 3.2mm	12 μ m to 105 μ m	1,020×1,220mm (40" ×48") 1,070×1,220mm (42" ×48")	915×1,220mm (36" ×48")

※ Other sheet size and thickness could be available upon request.

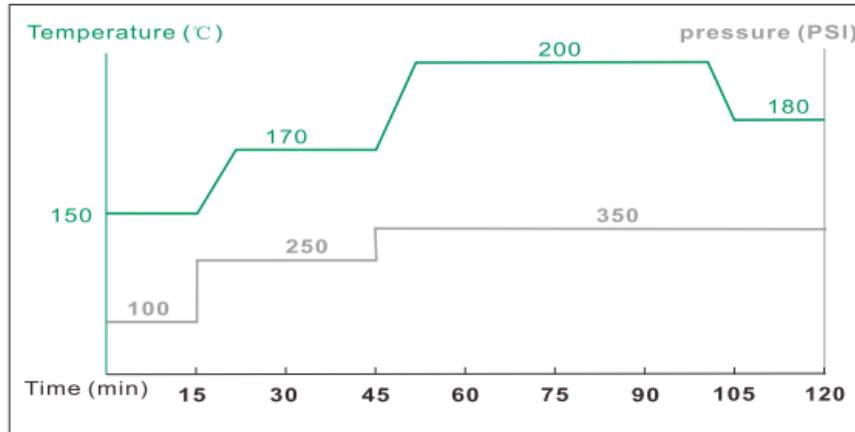
※ UL认可单、双面PCB板最小厚度0.07mm。



S0401 PREPREG

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HOT PRESSING CYCLE



Heat-up rate: 1.0~2.5°C/min(80~140°C)

Curing time: >30min(170~180°C)

The hot pressing parameters is for your reference only, please turn to Shengyi Technology Co., Ltd for detailed information.

PREPREG STORAGE

STORAGE CONDITION

- Three months when stored at <23 °C and <50% RH .
- Six 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. Were kept in normal condition, prepreg might absorb moisture and its bonding strength would be weakened.
- Avoid UV-rays and strong light.