



# S1141 170

(ANSI:FR-4)UV Blocking/ High Tg

## 特点

- 高Tg170℃ (DSC)。
- UV Blocking/AOI兼容。
- 优良的PCB加工性能。

## FEATURES

- High Tg170℃ (DSC)。
- UV Blocking/AOI Compatible.
- Good PCB processability.

## 应用领域

计算机及外围设备、通讯设备、仪器仪表、办公自动设备等。

## APPLICATIONS

Computer, communication equipment instrumentation, OA equipment, and etc.

## GENERAL PROPERTIES

Test Item		Treatment Condition	Unit	Property Data	
				SPEC	Typical Value
Tg		DSC	℃	≥ 170	175
Flammability		C-48/23/50	-	V-0	V-0
		E-24/125			
Volume Resistivity		After moisture resistance	M Ω ·cm	≥ 10 <sup>6</sup>	5.2×10 <sup>8</sup>
		E-24/125		≥ 10 <sup>3</sup>	5.3×10 <sup>6</sup>
Surface Resistivity		After moisture resistance	M Ω	≥ 10 <sup>4</sup>	5.4×10 <sup>7</sup>
		E-24/125		≥ 10 <sup>3</sup>	5.1×10 <sup>6</sup>
Arc Resistance		D-48/50+D-0.5/23	S	≥ 60	115
Dielectric Breakdown		D-48/50+D-0.5/23	KV	≥ 40	55
Dielectric Constant (1MHz)		C-24/23/50	-	≤ 5.4	4.5
Dissipation Factor (1MHz)		C-24/23/50	-	≤ 0.035	0.016
Thermal Stress	Unetched	288℃, solder dip	-	> 10s No delamination	60s No delamination
	Etched				
Peel Strength	1oz	288℃, 10s	N/mm	≥ 1.05	1.7
	Cu. Foil	125℃		≥ 0.70	1.5
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	μ m/m℃	-	55
	After Tg	TMA	μ m/m℃	-	290
	50~260℃	TMA	%	-	4.0
Td		10℃/min, N <sub>2</sub> , 5% Wt Loss	℃	-	300
T260		TMA	min	-	8
T288		TMA	min	-	-
CTI		IEC60112 Method	V	175~250(grade3)	200

Remarks: All the data listed above can meet IPC-4101/24 requirement.

Specimen Thickness:1.6mm

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

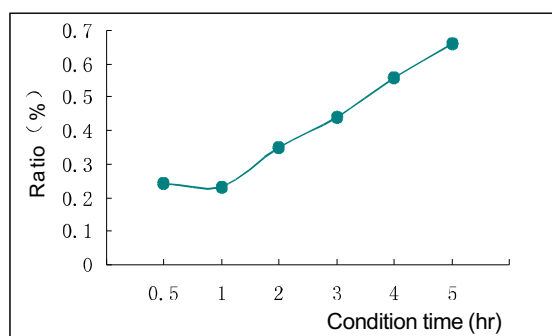
The figures following the letter symbols indicate with the first digit the duration of the preconditioning in hours, with the second digit the preconditioning temperature in °C and with the third digit the relative humidity.



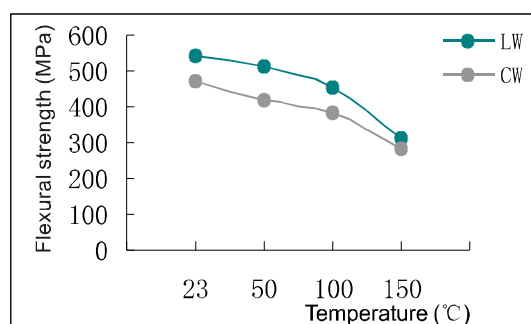
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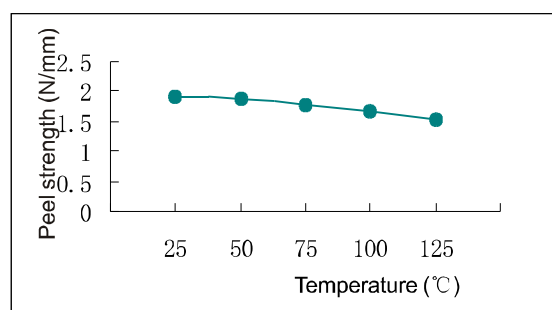
## ■ Water absorption at pressure cooker



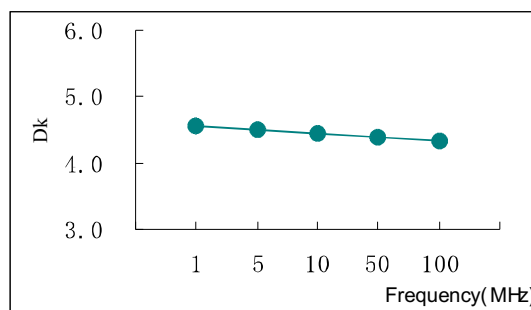
## ■ Flexural strength



## ■ Peel strength



## ■ Dielectric constant



## 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" )	915×1,220mm (36" ×48" )
		1,070×1,220mm (42" ×48" )	

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



# S0401 170 PREPREG

(ANSI:FR-4) Bonding Prepreg For S1141 170

## 特点

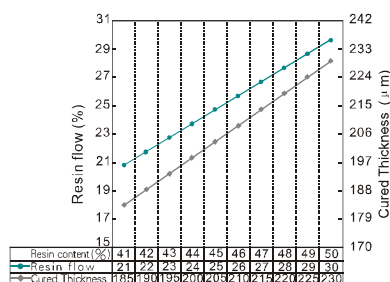
- Tg170℃ (DSC) .
- UV Blocking/AOI兼容。
- 优良的粘结性能，作业窗口宽。

## FEATURES

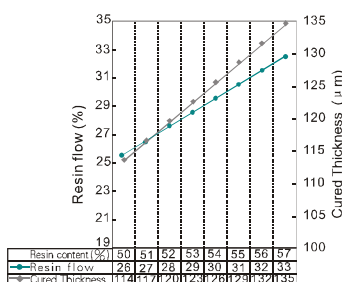
- Tg170℃ (DSC) .
- UV Blocking/AOI Compatible.
- Excellent bonding strength ,wide operating window.

## PREPREG PARAMETERS

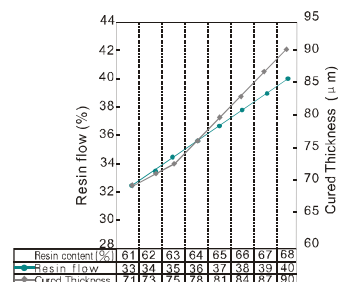
### 7628 TYPE PREPREG



### 2116 TYPE PREPREG



### 1080 TYPE PREPREG



Designation	Glass fabric type	Performance	Gel time (sec)	Resin Content (%)	Resin flow (%)	Cured Thickness (μm)	Standard Size (roll type)
S0401170	106	High Tg (Tg 170℃)	140±20	71±3	37±5	50±10	1,260mm×114.3m (125yards)
	106LD			71±3	37±5	50±10	
	1078LD			64±3	36±5	78±10	
	1080			X±3	X±5	X±10	
	1086LD			61±3	33±5	78±10	
	2112			57±3	30±5	90±15	
	2113			56±3	26±5	100±15	
	2313			55±3	26±5	100±15	
	3313			55±3	26±5	100±15	
	2116			X±3	X±5	X±15	
	2165			52±3	26±5	140±15	
	1500			45±3	22±5	160±15	
	7628			X±3	X±5	X±20	

Type, Resin Content and Size Could be Available Upon Request

### Prepreg Test Method

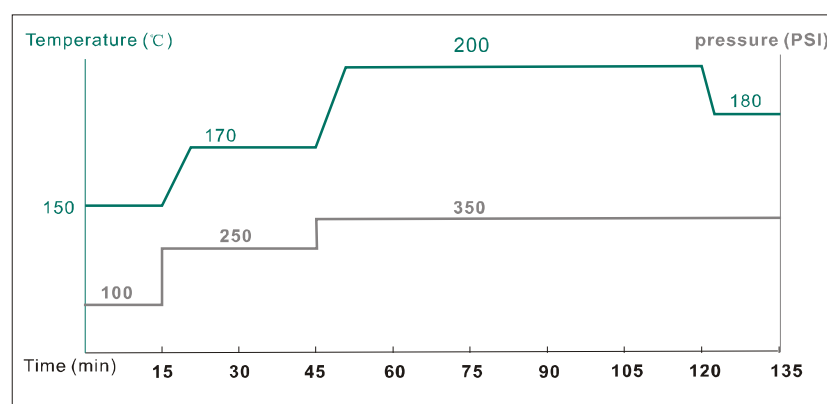
- Resin Content, Resin Flow, Gel Time: IPC-TM-650



# S0401 170 PREPREG

(ANSI:FR-4) Bonding Prepreg For S1141 170

## HOT PRESSING CYCLE



Heat-up rate: 1.5~2.5°C/min(80~140°C)  
Curing time: >45min(180~190°C)

## 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.