



# S1600

(UL ANSI:FR-4.0) High CTI

## 特点

- 优异的耐漏电起痕性，CTI≥600V。
- UV Blocking。
- 优良的PCB加工性
- 不适合翻洗绿油(阻焊油墨)

## FEATURES

- Excellent tracking resistance, CTI≥600V.
- UV Blocking.
- Good PCB processability.
- Not recommended for solder mask rework.

## 应用领域

等离子显示屏、液晶显示屏、电源基板、电视机、电冰箱、洗衣机等。  
不适用于有CAF要求的应用。

## APPLICATIONS

PDP,LCD,power base board, TV, refrigerator, washing machine, and etc.  
Not suitable for Anti-CAF application.

## GENERAL PROPERTIES

Test Item	Treatment Condition	Unit	Property Data	
			SPEC	Typical Value
Tg	DSC	°C	≥125	135
Flammability	C-48/23/50	-	V-0	V-0
	E-24/125			
Volume Resistivity	After moisture resistance	MΩ-cm	≥10 <sup>6</sup>	5.0×10 <sup>8</sup>
	E-24/125		≥10 <sup>3</sup>	5.0×10 <sup>6</sup>
Surface Resistivity	After moisture resistance	MΩ	≥10 <sup>4</sup>	5.0×10 <sup>7</sup>
	E-24/125		≥10 <sup>3</sup>	5.0×10 <sup>6</sup>
Arc Resistance	D-48/50+D-0.5/23	S	≥60	126
Dielectric Breakdown	D-48/50+D-0.5/23	KV	≥40	60
Dielectric Constant (1MHz)	C-24/23/50	-	≤5.4	4.7
Dissipation Factor (1MHz)	C-24/23/50	-	≤0.035	0.016
Thermal Stress	Unetched	288°C, solder dip	>10s No delamination	60s No delamination
	Etched			
Peel Strength	1oz	288°C, 10s	≥1.05	1.8
	Cu. Foil	125°C		
Flexural Strength	LW	A	≥415	550
	CW		≥345	450
Water Absorption	D-24/23	%	≤0.80	0.10
CTI	IEC60112 Method	V	PLC 0(≥600V)	PLC 0
CTE z-axis	Before Tg	TMA	PPM/°C	55
	After Tg		PPM/°C	308
Td	10°C/min, N <sub>2</sub> , 5%Wt Loss	°C	-	310

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.

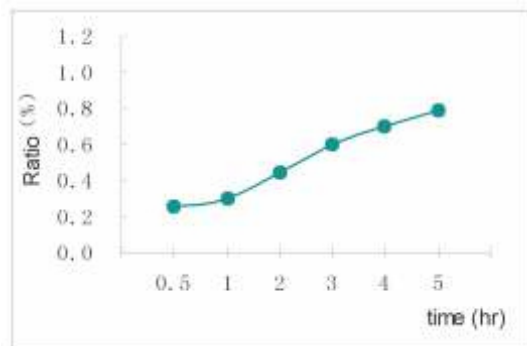
The figures following the letter symbols indicate with the first digit the duration of the preconditioning in hours, with the second digit the preconditioning temperature in °C and with the third digit the relative humidity.



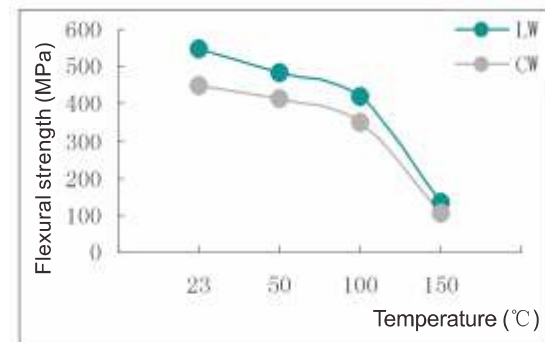
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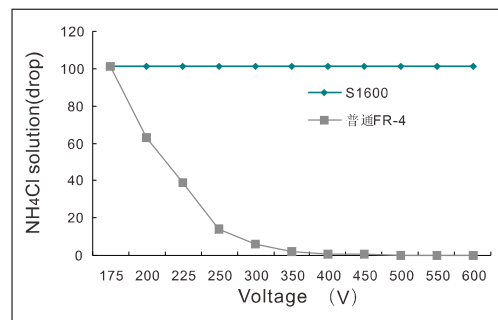
## Water absorption at pressure cooker



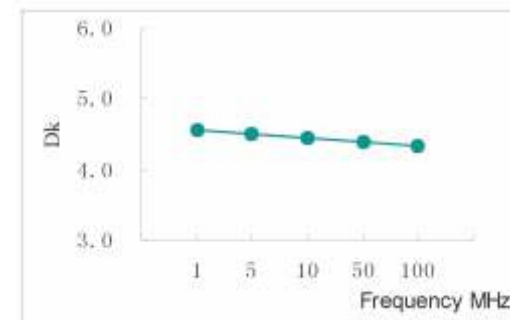
## Flexural strength



## The CTI difference between S1600 and standard FR-4



## Dielectric constant



## PURCHASING INFORMATION

Thickness	Copper foil	Standard Size	
0.8mm 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.