



# S1600

(ANSI:FR-4) High CTI

## 特点

- 优异的耐漏电起痕性，CTI≥600。
- UV Blocking。
- 优良的PCB加工性

## FEATURES

- Excellent tracking resistance, CTI≥600.
- UV Blocking.
- Good PCB processability.

## 应用领域

电源基板、电视机、电冰箱、洗衣机等。

## APPLICATIONS

Power base board, TV, refrigerator, washing machine, and etc.

## 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>9</sup>
	E-24/125		≥ 10 <sup>3</sup>	5.0×10 <sup>7</sup>
Surface Resistivity	After moisture resistance	MΩ	≥ 10 <sup>4</sup>	5.0×10 <sup>6</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 Etched	288°C, solder dip	> 10s	60s
			No delamination	No delamination
Peel Strength	1oz Cu. Foil	288°C, 10s	≥ 1.05	1.8
		125°C	≥ 0.70	1.6
Flexural Strength	LW	A	≥ 415	550
	CW		≥ 345	450
Water Absorption	D-24/23	%	≤ 0.80	0.10
CTI	IEC60112 Method	V	≥600(grade0)	600
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: All the data listed above can meet IPC-4101/21 requirement.  
Specimen Thickness:1.6mm

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

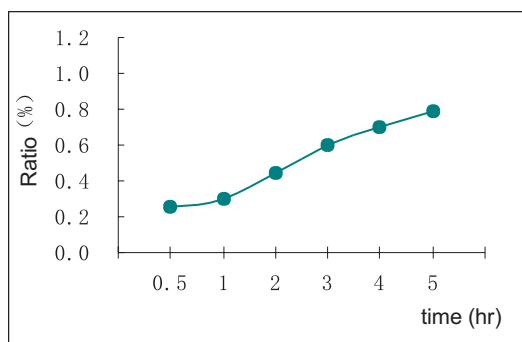
The figures following the letter symbols indicate with the first digit the duration of the preconditioning in hours, with the second digit the preconditioning temperature in °C and with the third digit the relative humidity.



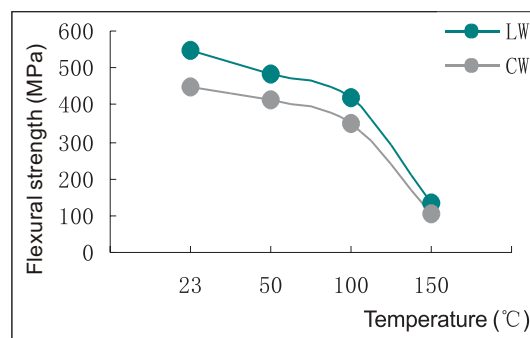
# S1600

(ANSI:FR-4) High CTI

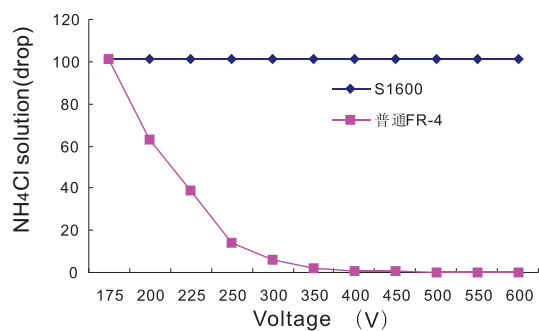
## Water absorption at pressure cooker



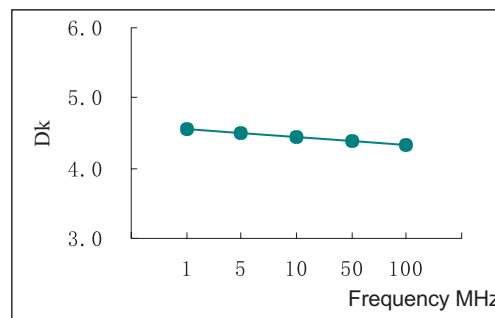
## Flexural strength



## The CTI difference between S1600 and normal 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" ) 915×1,220mm (36" ×48" ) 1,070×1,220mm (42" ×48" )

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