

# S3116

(ANSI:CEM-1) High CTI

## 特点

- 优异的耐漏电起痕性，CTI≥600。
- 优异的冲孔性，可冷冲，有利于提高生产率，冲模使用寿命长。
- 良好的耐热性、耐湿性、良好的机械性能和电性能。

## FEATURES

- Superior tracking resistance, CTI≥600.
- Excellent punching property, cold punching applicable, increased throughput, long punching tool life.
- Good heat resistance and moisture resistance, good mechanical properties and electrical properties.

## 应用领域

高温、高压、潮湿、污秽场合中使用的电源基材、显示器、超声波设备等。

## APPLICATIONS

Power supply, display, ultrasonic machine used in high-temperature high-pressure, moist and dirty situation..

## GENERAL PROPERTIES

Test Item	Treatment Condition	Unit	Property Data		
			SPEC	Typical Value	
Tg	DSC	°C	-	105	
Flammability	C-48/23/50	-	V-0	V-0	
	E-24/125				
Volume Resistivity	C-96/35/90	MΩ-cm	≥ 10 <sup>6</sup>	5.25×10 <sup>8</sup>	
	E-24/125		≥ 10 <sup>3</sup>	3.06×10 <sup>6</sup>	
Surface Resistivity	C-96/35/90	MΩ	≥ 10 <sup>4</sup>	7.08×10 <sup>6</sup>	
	E-24/125		≥ 10 <sup>3</sup>	6.26×10 <sup>6</sup>	
Arc Resistance	D-48/50+D-0.5/23	S	≥ 60	120	
Dielectric Breakdown	D-48/50+D-0.5/23	KV	≥ 40	49	
Dielectric Constant (1MHz)	C-24/23/50	-	≤ 5.4	4.5	
Dissipation Factor (1MHz)	C-24/23/50	-	≤ 0.035	0.021	
Thermal Stress	Unetched Etched	260°C, 20s	-	No delamination	274°C 20s No delamination
Peel Strength	1oz Cu. Foil	260°C, 10s	N/mm	≥ 1.05	1.78
		105°C		-	1.60
Flexural Strength	LW	A	MPa	≥ 242	400
	CW			≥ 172	350
Water Absorption	D-24/23	%	≤ 0.35	0.13	
CTI	IEC60112 Method	V	≥ 600	600	

Specimen Thickness: 1.6mm single side board

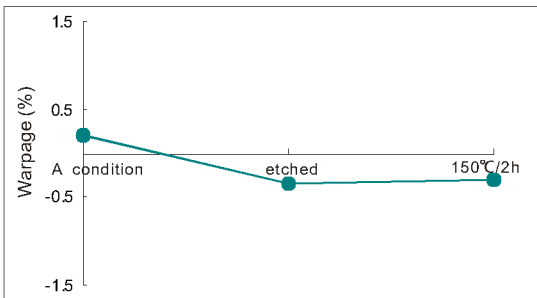
Explanations: C = Humidity conditioning;  
D = Immersion conditioning in distilled water;  
E = Temperature conditioning.

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.

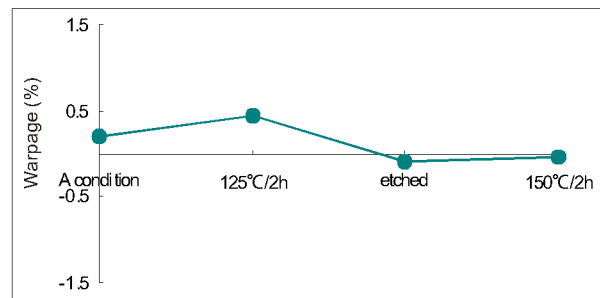
# S3116

(ANSI:CEM-1) High CTI

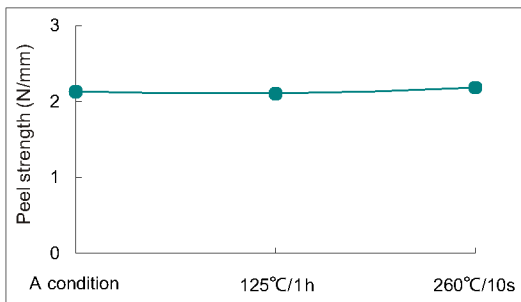
## Warpage of S3116 (No-treating)



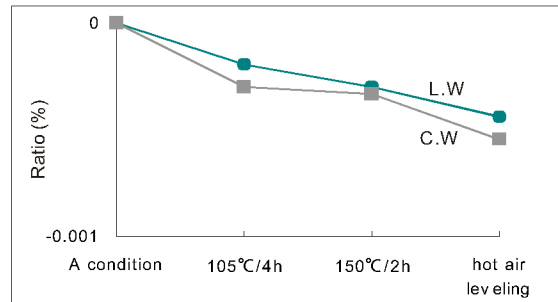
## Warpage of S3116 (After treating: 125°C 2hr)



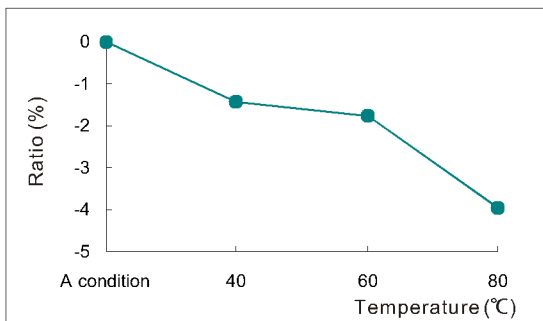
## Peel strength



## Dimensional stability



## Hole diameter shrinkage Punching process



❖ Specimen Thickness: 1.6mm single side board

## PURCHASING INFORMATION

Thickness	Copper foil	Standard Size
0.6mm to 3.2mm	18 $\mu$ m	1,020 × 1,220mm (40" × 48" ) 915 × 1,220mm (36" × 48" )
	to 105 $\mu$ m	1,070 × 1,220mm (42" × 48" )

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