



S3110

(UL ANSI:CEM-1)

FEATURES

- Good thermal reliability and moisture resistance, lower warpage, good mechanical properties and electrical properties.

APPLICATIONS

Home electrical appliance, display, power supply, keyboard, instrument, game machine, and etc.

GENERAL PROPERTIES

Test Item	Treatment Condition	Unit	Property Data		
			SPEC	Typical Value	
Tg	DSC	°C	-	110	
Flammability	C-48/23/50	Rating	V-0	V-0	
	E-24/125				
Volume Resistivity	C-96/35/90	MΩ-cm	≥ 10 ⁶	7.8×10 ⁸	
	E-24/125		≥ 10 ³	2.9×10 ⁶	
Surface Resistivity	C-96/35/90	MΩ	≥ 10 ⁴	5.6×10 ⁷	
	E-24/125		≥ 10 ³	2.8×10 ⁶	
Arc Resistance	D-48/50+D-0.5/23	S	≥60	118	
Dielectric Breakdown	D-48/50+D-0.5/23	KV	≥ 40	45+Kv NB	
Dielectric Constant (1MHz)	C-24/23/50	-	≤ 5.4	4.4	
Dissipation Factor (1MHz)	C-24/23/50	-	≤ 0.035	0.022	
Thermal Stress	Unetched	288°C	10s No delamination	20s No delamination	
	Etched				
Peel Strength	1oz	288°C, 10s	N/mm	≥ 1.05	1.80
	Cu. Foil	125°C		-	1.60
Flexural Strength	LW	A	MPa	≥ 242	420
	CW			≥ 172	358
Water Absorption	D-24/23	%	≤ 0.50	0.13	
CTE, z-axis	Before Tg	TMA	μ m/m°C	-	110
			μ m/m°C	-	330
			50~260°C	-	6.2
CTI	IEC60112 Method	V	PLC1(400V—600V)	PLC1	

Remarks: 1.Specification sheet:IPC-4101/10, 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 Sci.Tech.Co., Ltd . for detailed information, and all rights from this data sheet are reserved by Shengyi Sci.Tech.Co., Ltd .

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

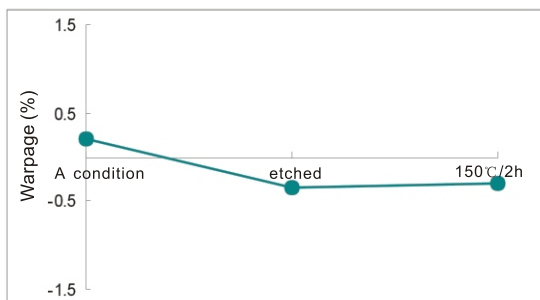
The figures following the letter symbols indicate with the first digit the duration of the preconditioning in hours, with the second digit the preconditioning temperature in °C and with the third digit the relative humidity.



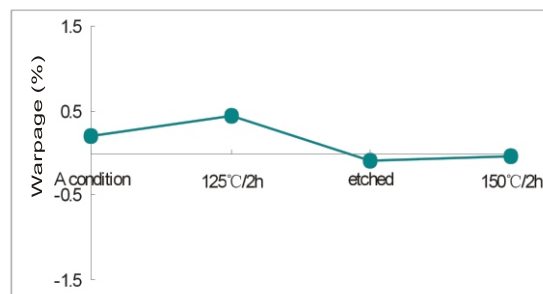
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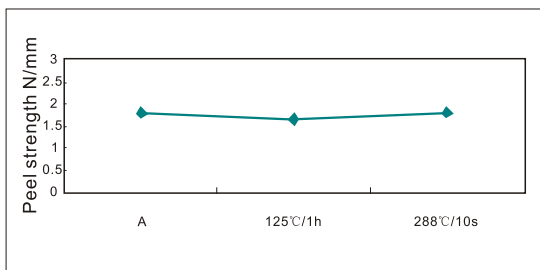
■ Warpage of S3110 (No-treating)



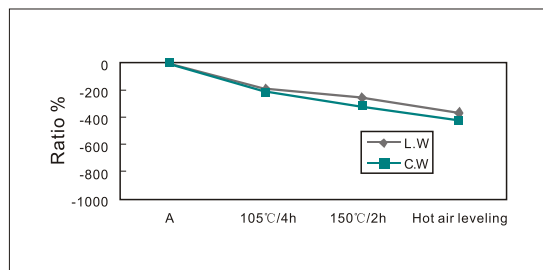
■ Warpage of S3110 (After treating: 125°C 2hr)



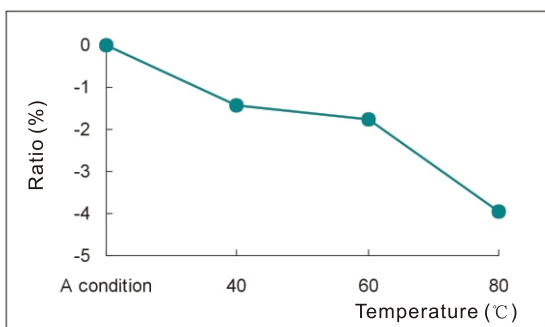
■ Peel strength



■ 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 μ m	1,020×1,220mm (40" × 48")
	to 105 μ m	915×1,220mm (36" × 48")
		1,070×1,220mm (42" × 48")

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