

## Технологические параметры СЕМ-1

### Features

- Excellent punching property, Suitable for punching at 45°C~70°C
- Excellent heat resistance.
- IPC-4101 B specification is applicable
- Plated through holes are not recommended for the cellulose core is easily attacked by the Electrolyte

### General Properties

Test Item	Unit	Test Method (IPC-TM-650)	Test Condition	Specification (IPC-4101B)	Typical Value
Peel Strength (1 oz. )	N/mm	2.4.8	125°C	--	1.65
			Float 260°C / 10 Sec	≥1.05	1.6/1.45
Thermal Stress	Sec	2.4.13.1	Float260°C/unetched	≥10	25
Bow / Twist	%	2.4.22.1	A	≤ 1.5	0.3 / 0.4
Flexural Strength	N/mm <sup>2</sup>	2.4.4	Warp	≥242	420
			Fill	≥172	290
Flammability	Rating	UL94	UL-94	UL94 V-0	V-0
Surface Resistivity	MΩ	2.5.17.1	C-96/35/90	≥1.0×10 <sup>4</sup>	1.0×10 <sup>6</sup>
Volume Resistivity	MΩ-cm	2.5.17.1	C-96/35/90	≥1.0×10 <sup>6</sup>	1.0×10 <sup>8</sup>
Z-Axis Expansion	ppm/°C	2.4.24	E-2/105 TMA	---	100/320
	%			---	6.0
Dielectric Constant	—	2.5.5.2	Etched/@1 MHZ	≤5.4	4.6
Loss Tangent	—	2.5.5.2	Etched/@1 MHZ	≤0.035	0.023
Arc Resistance	Sec	2.5.1	D-48/50+D-0.5/23	≥60	125
Moisture Absorption	%	2.6.2.1	D-24/23	≤0.5	0.25
Comparative Tracking Index	V	IEC60112	Etched/0.1% NH <sub>4</sub> CL	≥175	175/300/600

Remarks: Specimen Thickness:1.6mm 1/0

A = Keep the specimen originally without any process

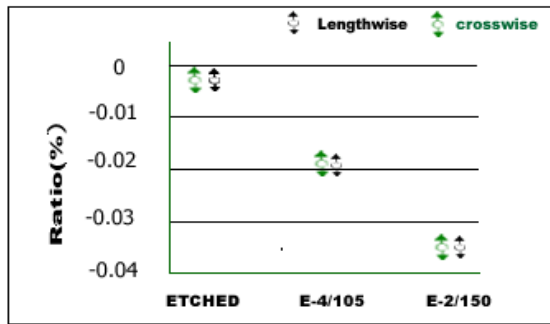
C = Temperature and humidity conditioning

D = Immersing in distilled water with temperature control

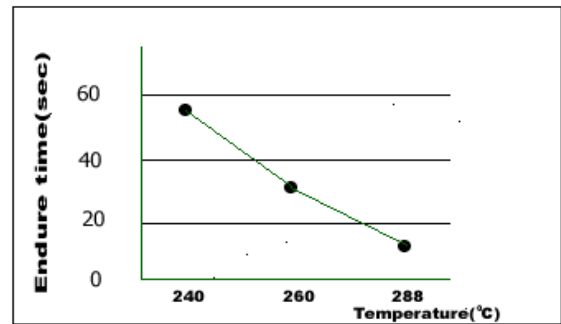
E =Temperature conditioning

## Speciality Chart

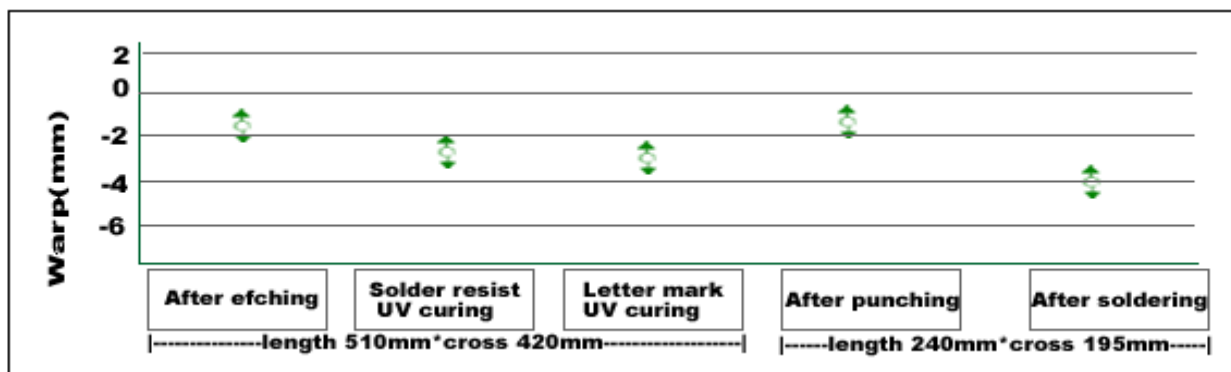
### Dimensional stability



### Thermal delamination time



### Warpage through PCB process (thickness 1.6mm single side)



## Applications

- Display, VCR, Power supply, Industrial Instrument, Digital sound recorder, etc.

## Purchasing Information

Base Color	Thickness	Copper Cladding	Regular Size (mm)	CTI Value
CEM-1(pure-white) CEM-1W (white) CEM-1F (yellow)	0.8mm~ 1.6mm	18μm 35μm 70μm	915*1220mm (36"*48") 1020*1220mm (40"*48") 1067*1220mm (42"*48")	KB-5150:175/300V KB-5150&: 600V

Note: Other sheet size and thickness could be available upon request.