

S1141 170

(ANSI:FR-4)UV Blocking/ High Tg

特点

- 高Tg170 (DSC)。
- UV Blocking 和 AOI兼容。
- 优秀的耐热性和耐化学性。
- 能通过多次的热冲击测试。
- 从环境温度到260℃, 板材具备较低的热膨胀系数。
- PCB制作工艺与标准FR-4相同。

FEATURES

- Higher Tg170 (DSC).
- UV Blocking and AOI compatible.
- Superior thermal and chemical reliability.
- Passes multiple hot shock testing.
- Lower CTE from ambient to 260℃.
- Standard FR-4 processing.

应用领域

计算机及外围设备、通讯设备、仪器仪表、办公自动设备等。

APPLICATIONS

Computer, communication equipment instrumentation, OA equipment, etc.

GENERAL PROPERTIES

Test Item		Treatment Condition	Unit	Property Data	
				SPEC	Typical Value
Tg		DSC		165	175
Flammability		C-48/23/50	-	V-0	V-0
		E-24/125			
Volume Resistivity		After moisture resistance	M Ω-cm	10 ⁶	5 × 10 ⁸
		E-24/125		10 ³	5 × 10 ⁶
Surface Resistance		After moisture resistance	M Ω	10 ⁴	5 × 10 ⁷
		E-24/125		10 ³	5 × 10 ⁶
Arc Resistance		D-48/50+D-0.5/23	S	60	115
Dielectric Breakdown		D-48/50+D-0.5/23	KV	40	55
Dielectric Constant (1MHz)		C-24/23/50	-	5.4	4.5
Dissipation Factor (1MHz)		C-24/23/50	-	0.035	0.016
Thermal Stress	Unetched	288℃, 20s	-	No delamination	No delamination
	Etched				
Peel Strength	1oz Cu. Foil	288℃, 10s	N/mm	1.05	1.7
		125		0.70	1.5
Flexural Strength	LW	A	MPa	415	600
	CW			345	500
Water Absorption		D-24/23	%	0.35	0.15

Specimen Thickness:1.6mm

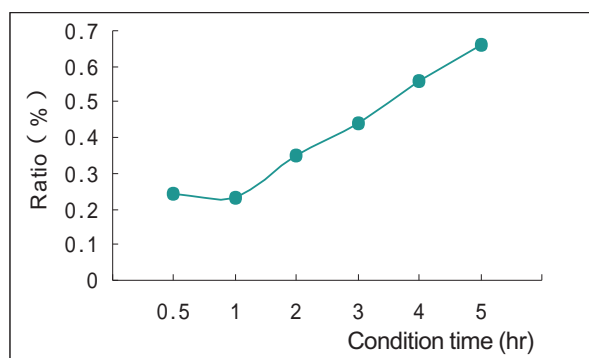
Explanations: C = Humidity conditioning;
D = Immersion conditioning in distilled water;
E = Temperature conditioning.

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.

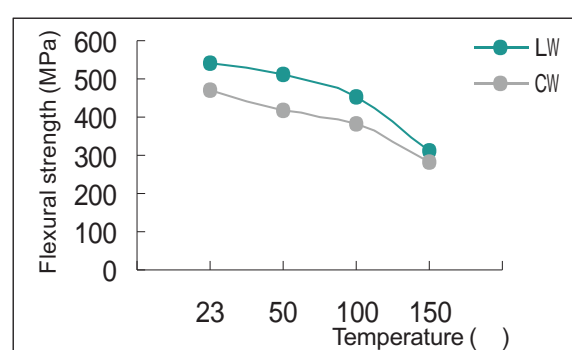
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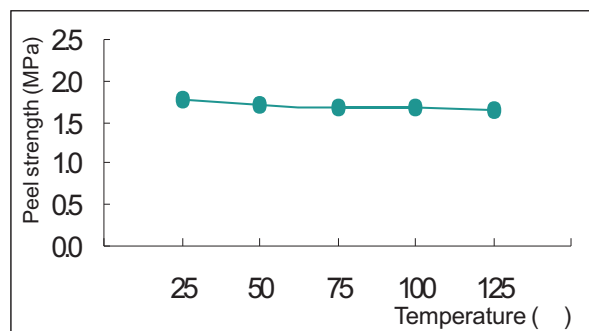
Water absorption at pressure cooker



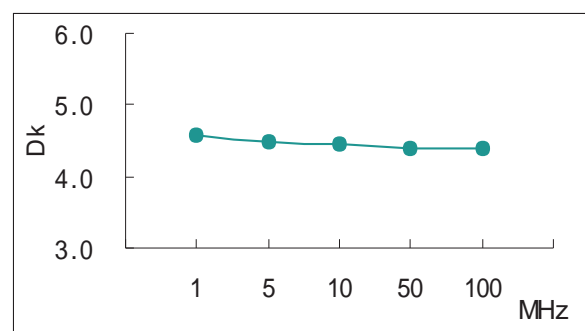
Flexural strength



Peel strength



Dielectric constant



S1141 170 VS. Conventional FR-4

Property	S1141 170	Conventional FR-4 (S1130)
Tg (°C)	175	135
Z CTE (ppm/°C) [30-260 °C]	160	190

PURCHASING INFORMATION

Thickness	Copper foil	Standard Size
0.05mm to 3.2mm	12 μm to 105 μm	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.