

# S1170

## (ANSI:FR-4)High Performance Epoxy Copper Clad Laminate

### 特点

- 优异的耐热性，热分解温度更高，T260 > 30min。
- 高Tg 170 (DSC)。
- 优良的耐化学性能与较低的吸水率。
- 可耐多次热冲击测试。
- 从环境温度到260，板材具备较低的热膨胀系数。
- 有优良的耐离子迁移性。
- UV Blocking 与AOI兼容。

### FEATURES

- High thermal performance, higher decomposition temperature, T260 > 30min.
- High Tg 170 (DSC).
- Excellent chemical resistance and lower water absorption.
- Through multiple thermal shock test.
- Lower CTE from ambient to 260.
- Excellent CAF resistance.
- UV Blocking and AOI compatible.

### 应用领域

计算机与通讯设备，工业控制用高档仪器仪表、路由器等。

### APPLICATIONS

Computer, Communication equipment precise apparatus and instrument, router, etc.

## GENERAL PROPERTIES

Test Item	Treatment Condition	Unit	Property Data	
			SPEC	Typical Value
Tg	DSC		170	175
Flammability	C-48/23/50	-	V-0	V-0
	E-24/125+des			
Volume Resistivity	After moisture resistance	M -cm	10 <sup>6</sup>	3.5 × 10 <sup>8</sup>
	E-24/125		10 <sup>3</sup>	2.3 × 10 <sup>6</sup>
Surface Resistance	After moisture resistance	M	10 <sup>4</sup>	1.8 × 10 <sup>5</sup>
	E-24/125		10 <sup>3</sup>	5.1 × 10 <sup>6</sup>
Arc Resistance	D-48/50+D-0.5/23	S	60	123
Dielectric Breakdown	D-48/50+D-0.5/23	KV	40	62
Dielectric Constant (1MHz)	C-24/23/50	-	5.4	4.6
Dissipation Factor (1MHz)	C-24/23/50	-	0.035	0.012
Thermal Stress	Unetched	288 ,20s	-	No delamination
	Etched			
Peel Strength	1oz	288 ,10s	N/mm	1.05
	Cu. Foil			1.45
Flexural Strength	LW	A	MPa	0.70
	CW			1.23
Water Absorption	D-24/23	%	415	587
			345	531
Z-CTE	TMA	μm/m	0.35	0.10
			-	150

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 and with the third digit the relative humidity.