

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	MΩ-cm	≥ 10 ⁶	3.5×10 ⁸	
	E-24/125		≥ 10 ³	2.3×10 ⁶	
Surface Resistance	After moisture resistance	MΩ	≥ 10 ⁴	1.8×10 ⁵	
	E-24/125		≥ 10 ³	5.1×10 ⁶	
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 Etched	288℃, 20s	-	No delamination	
					No delamination
Peel Strength	1oz Cu. Foil	288℃, 10s	N/mm	≥ 1.05	1.45
		125℃		≥ 0.70	1.23
Flexural Strength	LW	A	MPa	≥ 415	587
	CW			≥ 345	531
Water Absorption	D-24/23	%	≤ 0.35	0.10	
Z-CTE	TMA	μm/m℃	-	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.