广东生益科技股份有限公司
GUANGDONG SHENGYI SCI.TECH

S1860

(ANSI:FR-4) High Tg Low Dk Copper Clad Laminate

特点

- 高Tg 210℃（DSC）。
- Dk≤3.6（1GHz），可提高信号传输速度。
- Df<0.008(1GHz),减少信号传输过程的能量损失。
- 具有优异的耐热性，T260>60min，适合于无铅焊工艺。
- 加工性能与普通FR-4相同。

应用领域

1.高频无线通讯。
2.卫星信号传输设备、导航系统和全球定位系统等。
3.高速计算机。
4.背板。
5.表面贴装、BGA多层板等。

FEATURES

- High Tg 210℃ (DSC).
- Dk≦3.6(1GHz),improve velocity of signal propagation.
- Df<0.008(1GHz) ,providing improved signal integrity with low signal loss.
- High thermal performance ,T260>60min ,suitable for lead-free process.
- PCB processing similar to conventional FR-4 processing.

APPLICATIONS

1.High frequency wireless communications.
2.Satellite signal transmission equipment,steering system, GPS,and so on.
3.High speed computer.
4.Backplanes.
5.Surface mount multilayers and BGA multilayers,ect.

GENERAL PROPERTIES

Test Item		Treatment Condition	Unit	Property Data	
				SPEC	Typical Value
Tg		DSC	℃	≥200	210
Flammability		C-48/23/50	-	V-0	V-0
		E-24/125			
Volume Resistivity		After moisture resistance	MΩ-cm	≥ 10^6	10^7
		E-24/125		≥ 10^3	10^7
Surface Resistance		After moisture resistance	MΩ	≥ 10^4	10^7
		E-24/125		≥ 10^3	10^5
Arc Resistance		D-48/50+D-0.5/23	S	≥ 60	90
Dielectric Breakdown		D-48/50+D-0.5/23	KV	≥ 40	45+KVNB
Dielectric Constant (1GHz)		C-24/23/50	-	≤ 4.0	3.6
Dissipation Factor (1GHz)		C-24/23/50	-	≤ 0.015	0.008
Thermal Stress	Unetched	288℃ ,20s	-	No delamination	No delamination
	Etched				
Peel Strength	1oz Cu. Foil	288℃ ,10s	N/mm	≥ 1.05	1.46
		125℃		≥ 0.70	1.21
Flexural Strength	LW	A	Mpa	≥ 415	621
	CW			≥ 345	499
Water Absorption		D-24/23	%	≤ 0.35	0.15
T260		A（30～260℃）	Min	-	>60
CTE		TMA（30～260℃）	μm/m℃	-	140

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.