

S1139

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

特点

- Dk<3.9 (1GHz) , 可提高信号传输速度。
- Df<0.01 (1GHz),可减少信号传输过程的能量损失。
- 具有较好的耐热性和可靠性。
- UV Blocking和AOI兼容。
- 板材的加工特性与普通FR-4相同。
- 优秀性能价格比。

FEATURES

- Dk<3.9(1GHz),improve velocity of signal propagation.
- Df<0.01(1GHz),reduce energy loss of signal propagation.
- Have good thermal resistance and high reliability.
- UV Blocking and AOI compatible.
- Standard FR-4 processing.
- Best performance/cost ratio.

应用领域

1. 高频数字移动通讯。
2. 高速数字信息处理器。
3. 卫星信号传输设备、导航系统和全球定位系统等。
4. 中多层印刷电路板。

APPLICATIONS

- 1.High frequency digital mobile communication equipments.
- 2.High speed digital signal processor,such as super high speed computer.
- 3.Satellite signal transmission equipment,steering system,GPS,and so on.
- 4.Medium to high multilayer printed circuit board.

GENERAL PROPERTIES

Test Item	Treatment Condition	Unit	Property Data		
			SPEC	Typical Value	
Tg	DSC	°C	≥ 140	145	
Flammability	C-48/23/50	-	V-0	V-0	
	E-24/125				
Volume Resistivity	After moisture resistance	MΩ-cm	≥ 10 ⁶	2×10 ⁸	
	E-24/125		≥ 10 ³	9×10 ⁷	
Surface Resistivity	After moisture resistance	MΩ	≥ 10 ⁴	3×10 ⁶	
	E-24/125		≥ 10 ³	5×10 ⁷	
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	-	≤ 3.9	3.9	
Dissipation Factor (1GHz)	C-24/23/50	-	≤ 0.01	0.008	
Thermal Stress	Unetched	288°C,20s	-	No delamination	
	Etched				
Peel Strength	1oz Cu. Foil	288°C,10s	N/mm	≥ 1.05	1.06
		125°C		≥ 0.70	0.92
Flexural Strength	LW	A	MPa	≥ 415	446
	CW			≥ 345	349
Water Absorption	D-24/23	%	≤ 0.35	0.07	
CTE Z-axis	Before Tg	TMA	μm/m°C	-	60
	After Tg	TMA	μm/m°C	-	265

Specimen Thickness:1.6mm

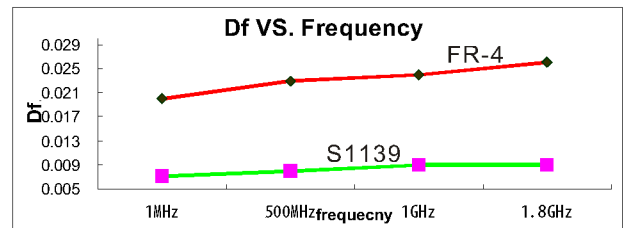
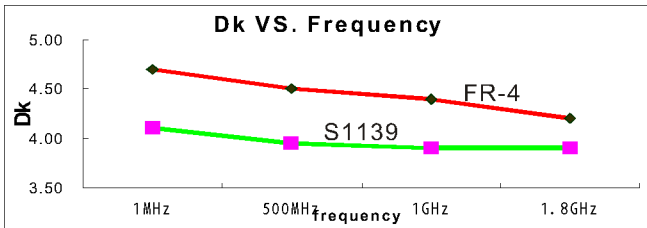
Explanations: C = Humidity conditioning;
D = Immersion conditioning in distilled water;
E = Temperature conditioning.

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.

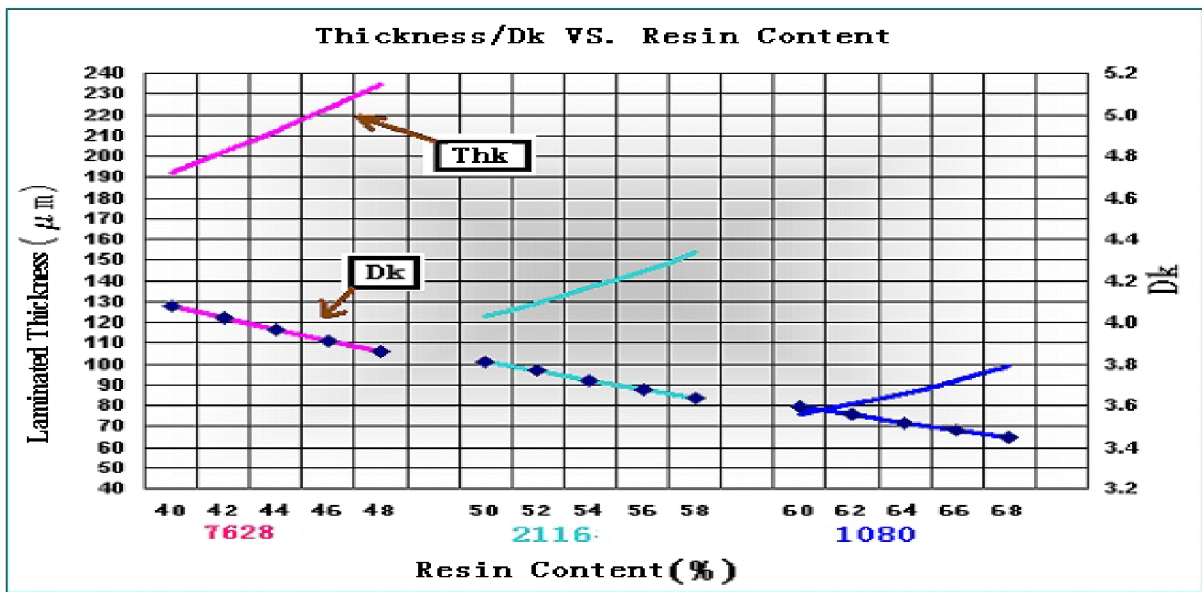
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Dk/Df VS. Frequency



Thickness/Dk VS. Resin Content



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.

СайфФОН
МЕХНОЛОЖИС