

KB-6160 (ANSI: FR-4.0)

Thin Core Laminate for Multilayer Board 多层电路板用薄内层板材

Features 特点

- 优异的尺寸稳定性和介电性能
Excellent dimensional stability and electric strength
- 优良的耐热性能和机械性能
Excellent heat resistance and mechanical properties
- 高速钻孔时产生的树脂污垢少
Less resin smear in high speed drilling
- 优异的 UV 阻挡功能和 AOI 荧光特性
UV Blocking and AOI compatible

应用领域

- 移动电话, 计算机, 检测设备, 录像机, 军用装备, 导向系统等

Applications

- Mobile phone, Computer, Instrumentation, Video recorder, Military equipment, Guidance systems

Construction 选配工艺

Thickness		Construction	Thickness		Construction
mm	mil		mm	mil	
0.05	2	1 × (#106)	0.356	14	2 × (#7628)
0.064	2.5	1 × (#106)	0.381	15	2 × (#7628)
0.076	3	1 × (#1080)	0.406	16	2 × (#7628)
0.089	3.5	1 × (#3313)	0.431	17	2 × (#7630)
0.102	4	1 × (#3313)	0.457	18	2 × (#7628) + 1 × (#1080)
0.125	5	1 × (#2116)	0.483	19	2 × (#7628) + 1 × (#2116)
0.152	6	1 × (#1506)	0.508	20	2 × (#7628) + 1 × (#2116)
0.178	7	1 × (#7628)	0.533	21	3 × (#7628)
0.203	8	1 × (#7628)	0.559	22	3 × (#7628)
0.229	9	2 × (#2116)	0.609	24	2 × (#7628) + 2 × (#2116)
0.254	10	2 × (#2116)	0.635	25	2 × (#7628) + 2 × (#2116)
0.279	11	2 × (#2116)	0.66	26	2 × (#7628) + 2 × (#2116)
0.305	12	2 × (#1506)	0.71	28	4 × (#7628)
0.33	13	2 × (#1506)	0.787	31	4 × (#7628)

The thickness listed above is not including copper's thickness. 以上厚度不含铜厚

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General Properties 一般特性

Test Item 测试项目	Unit 单位	Test Method (IPC-TM-650) 测试方法	Test Condition 处理条件	Specification (IPC-4101C) 规格值	Typical Value 典型值
Peel Strength (1 oz.) 铜箔剥离强度	N/mm	2.4.8	125°C	≥0.70	1.62
			Float 288°C/ 10 Sec	≥1.05	1.65
Thermal Stress 热应力	Sec	2.4.13.1	Float 288°C/ unetched	≥10	180
Bow / Twist 弯弓度/翘曲度	%	2.4.22.1	A	≤ 1.0	0.17 / 0.18
Flammability 燃烧性	Rating	UL94	UL94	UL94V-0	V-0
Glass Transition (Tg) 玻璃化转变温度	°C	2.4.25	E-2/150 (DSC)	≥130	136
Surface Resistivity 表面电阻	MΩ	2.5.17.1	C-96/35/90	≥1.0×10 ⁴	1.0×10 ⁶
Volume Resistivity 体积电阻	MΩ-cm	2.5.17.1	C-96/35/90	≥1.0×10 ⁶	1.0×10 ⁸
Dielectric Constant 介电常数	—	2.5.5.2	Etched/@1 MHZ	≤5.4	4.58
Loss Tangent 介质损耗	—	2.5.5.2	Etched/@1 MHZ	≤0.035	0.022
Arc Resistance 耐电弧性	Sec	2.5.1	D-48/50+D-0.5/23	≥60	125
Moisture Absorption 吸水率	%	2.6.2.1	D-24/23	≤0.80	0.23
Comparative Tracking Index 相比漏电起痕指数	V	IEC 60112	Etched/0.1% NH ₄ Cl	AABUS	175
TD	°C	2.4.24.6	TGA	—	305
Dimensional Stability 尺寸稳定性	ppm	3.9.1.2	Warp	±300	-210
			Fill		-180

Remarks: Specimen Thickness:0.51mm 1/1 样品厚度: 0.51mm 1/1 (不含铜厚)

A = Keep the specimen originally without any process 保持原样,不作处理

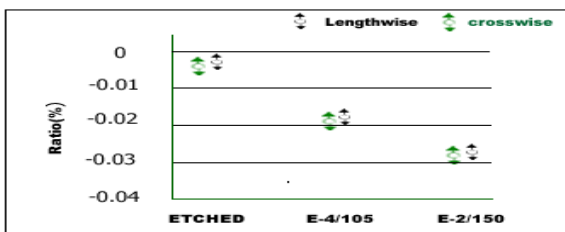
C = Temperature and humidity conditioning 恒温恒湿空气中处理

D = Immersing in distilled water with temperature control. 恒温水中处理

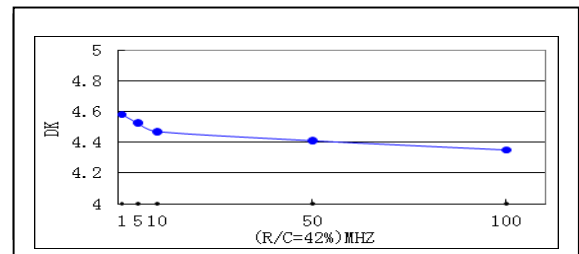
E = Temperature conditioning 恒温空气中处理

Speciality Chart 板材特性图

Dimensional stability 尺寸稳定性



Dielectric constant 介电常数



Purchasing Information 采购信息

Base Color 基板颜色	Thickness 厚度	Copper Cladding 铜箔厚度	Regular Size (mm) 常规尺寸
黄色 Yellow	0.05mm ~ 1.2mm	12μm, 18μm, 35μm, 70μm 105μm	940*1245mm (37" * 49") 1042*1245mm (41" * 49") 1093*1245mm (43" * 49")

Note: 1) Other sheet size and thickness could be available upon request.