

## KB-6160/6160A/6160C (ANSI: FR-4)

## 覆铜箔环氧玻纤布层压板

## Features 特点

- 兼容紫外光阻挡及光学自动检查功能,可提高 PCB 生产效率与准确性  
UVB and AOI (automatic optical inspection) compatible, so as to increase productivity and accuracy.
- 优良的耐热性能和机械性能  
Excellent heat resistance and mechanical properties
- 符合 IPC-4101C/21 的规范要求  
IPC-4101C/21 specification is applicable.

## 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	1.70
			Float 288°C / 10 Sec	≥1.05	1.75
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 / 0.35
Flexural Strength 抗弯强度	N/mm <sup>2</sup>	2.4.4	Warp	≥415	565
			Fill	≥345	416
Flammability 燃烧性	Rating	UL94	UL94	UL94 V-0	V-0
Glass Transition (Tg) 玻璃化转变温度	°C	2.4.25	E-2/105 DSC	≥130	135
Surface Resistivity 表面电阻	MΩ	2.5.17.1	C-96/35/90	≥1.0×10 <sup>4</sup>	1.0×10 <sup>6</sup>
Volume Resistivity 体积电阻	MΩ-cm	2.5.17.1	C-96/35/90	≥1.0×10 <sup>6</sup>	1.0×10 <sup>8</sup>
Dielectric Breakdown 介电击穿	kV	2.5.6	D-48/50+D0.5/23	≥40	69
Dielectric Strength 介电强度	kV/mm	2.5.6.2	D-48/50+D0.5/23	≥29	41
Dielectric Constant 介电常数	—	2.5.5.2	Etched/@1 MHZ	≤5.4	4.58
Loss Tangent 介电损耗	—	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	≤0.35(min0.51mm)	0.21
				≤0.80(max0.51mm)	0.19
Z-Axis Expansion Z-轴热膨胀系数	ppm/°C	2.4.24	E-2/105 TMA	—	58/286
TD	°C	2.4.24.6	TGA	—	305
T-260	min	2.4.24.1	TMA	—	10

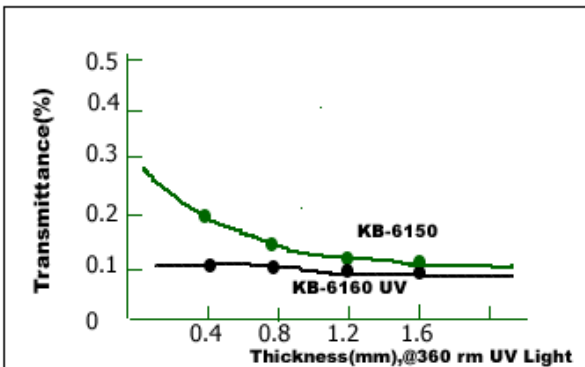
Remarks: Typical values for reference only 注: 典型值仅作参考 Specimen Thickness: 1.6 mm 1/1 样品厚度: 1.6 mm 1/1  
A = Keep the specimen originally without any process 保持原样,不作处理 C = Temperature and humidity conditioning  
在恒温恒湿的空气中处理; D = Temperature conditioning immersion in distilled water. 浸在恒温的水中处理  
E = Immersing in distilled water with temperature control 在恒温的空气中处理;

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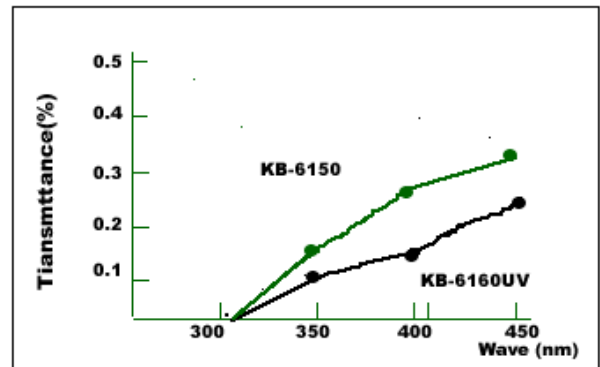
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#### Speciality Chart 板材特性图

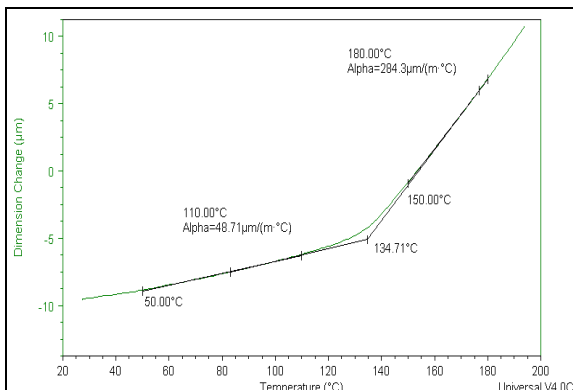
UV blocking (thickness) UV 阻挡



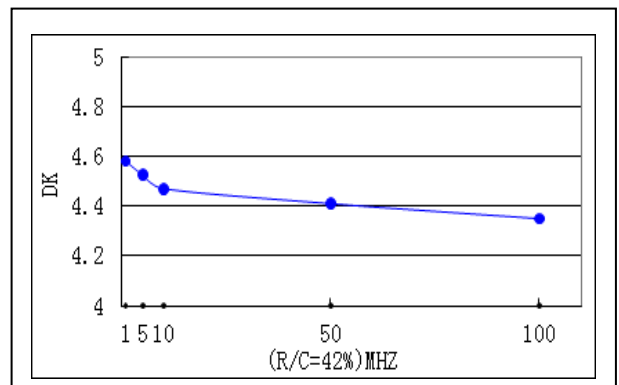
UV blocking (wave / UV-3100)



Thermal expansion of Z-direction (test by TMA)



Dielectric constant 介电常数



#### Applications 应用领域

- Computer, communication equipment, instrument, OA equipment, etc.  
计算机及外围设备、通讯设备、仪器仪表、办公自动设备等

#### 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	CTI Value CTI 值
黄色 (yellow)	0.05mm ~ 3.5mm	12µm, 18µm 35µm, 70µm 105µm	915*1220mm (36"*48") 1020*1220mm (40"*48") 1067*1220mm (42"*48")	KB-6160:150V KB-6160A:175V KB-6160C: 300V/600V

Note: 1) Other sheet size and thickness could be available upon request. 可根据客户要求提供其它尺寸和厚度;

2) Speciality chart for reference only. 以上图表仅供参考;

3) Version updates without notice. 版本更新恕不另行通知。