

## KB-6150/6150C (ANSI: FR-4)

## 覆铜箔环氧玻纤布层压板

## 特点

- 优异的尺寸稳定性
- 优良的耐热性能和机械性能
- 符合 IPC-4101C/21 的规范要求

## Features

- Excellent dimensional stability
- Excellent heat resistance and mechanical properties
- 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	≥0.7	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	0.21 / 0.39
Flexural Strength 抗弯强度	N/mm <sup>2</sup>	2.4.4	Warp	≥415	560
			Fill	≥345	410
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	132
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 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	≤0.35 (min0.51mm)	0.22
				≤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
Comparative Tracking Index 相比漏电起痕指数	V	IEC60112	Etched / 0.1% NH <sub>4</sub> CL	≥150	150 / 600

Remarks: Typical values for reference only 注: 典型值只作参考 Specimen Thickness: 1.6mm 1/1 样品厚度: 1.6mm 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 = Immersing in distilled water with temperature control. 浸在恒温的水中处理

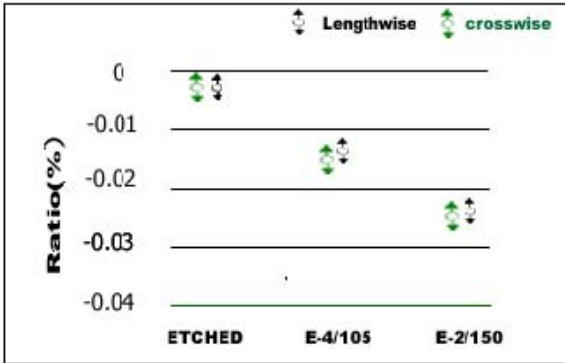
E = Temperature conditioning 在恒温的空气中处理

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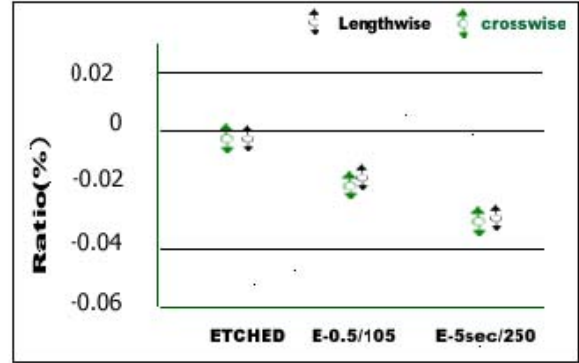
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#### Speciality Chart 板材特性图

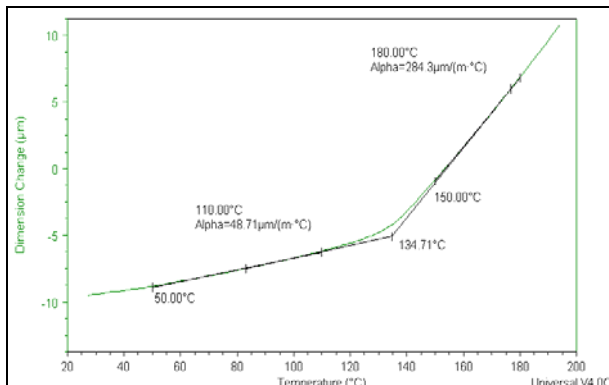
Dimensional stability 尺寸稳定性



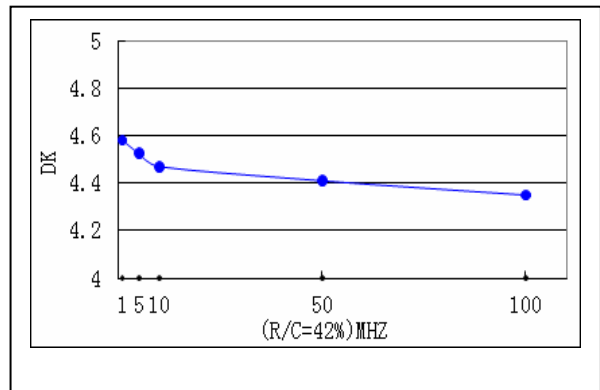
Dimensional stability-PCB process (size:360\*310mm)



Thermal expansion of Z-direction (test by TMA)



Dielectric constant 介电常数



#### Application 应用领域

- Computer, VCR, Instrument, Communication equipment etc.  
计算机、摄像机、仪器仪表、通讯设备等

#### 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
自然色 Nature 黑色 Black	0.05mm ~ 3.5mm	12µm, 18µm, 35µm, 70µm, 105µm	915*1220mm (36"*48") 1020*1220mm (40"*48") 1067*1220mm (42"*48")	KB-6150: (CTI 150V) KB-6150C: (CTI 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。