

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

## 覆銅箔環氧玻纖布層壓板

## 特點

- 優異的尺寸穩定性
- 優良的耐熱性能和機械性能
- 耐漏電起痕指數 (CTI150V/175V/300V/600V)
- 符合 IPC-4101B 的規範要求

## Features

- Excellent dimensional stability
- Excellent heat resistance and mechanical properties
- CTI value 150V/175V/ 300V / 600V
- IPC-4101B specification is applicable .

## 應用領域 Application

- 電腦、攝像機、儀器儀錶、通訊設備等  
Computer , VCR, Instrumentation, Communication equipment etc.

## General Properties 一般特性

Test Item 測試項目	Unit 單位	Test Method (IPC-TM-650) 測試方法	Test Condition 處理條件	Spec (IPC-4101B) 規格值	Typical Value 典型值
Peel Strength (10Z) 銅箔剝離強度	N/mm	2.4.8	125°C	≥0.7	1.70
			Float 288°C / 10Sec	≥1.05	1.75
Thermal stress 熱應力	Sec	2.4.13.1	Float 288°C / unetched	≥10	60 No delamination
Bow / Twist 彎弓度/翹曲度	%	2.4.22.1	A	≤ 1.0	0.21 / 0.39
Flexural Strength 抗彎強度	N/mm <sup>2</sup>	2.4.4	Warp	≥415	560
			Fill	≥345	410
Flammability 燃燒性	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 Resistance 表面電阻	MΩ	2.5.17.1	C-96/35/90	≥1.0×10 <sup>4</sup>	1.0×10 <sup>6</sup>
Volume Resistance 體積電阻	MΩ-cm	2.5.17.1	C-96/35/90	≥1.0×10 <sup>6</sup>	1.0×10 <sup>8</sup>
Dielectric Constant 介電常數	—	2.5.5.2	Etched/@1 MHZ	≤5.4	4.5
Loss Tangent 介質損耗	—	2.5.5.2	Etched/@1 MHZ	≤0.035	0.022
Arc Resistance 耐電弧性	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	0.12
Z-Axis Expansion Z-轴热膨胀系数	ppm/°C	2.4.24	E-2/105 TMA	—	58/298
X/Y-Axis Expansion X/Y 轴热膨胀系数	ppm/°C	2.4.24	E-2/105 TMA	—	13/15
Comparative Tracking Index 相比漏電起痕指數	V	IEC 112	Etched/0.1%NH <sub>4</sub> Cl	AABUS	150 / 175 300 / 600

Remarks: 可提供不同 CTI 等級的板材 The CCL may offer different CTI grade.

Specimen Thickness: 1.6 mm 1/1 樣品厚度：1.6 mm 1/1

A=Maintain original shape, do not make handling 保持原樣, 不作處理

C= Temperature and humidity conditioning 在恒溫恒濕的空氣中處理

E=Temperature conditioning 在恒溫的空氣中處理

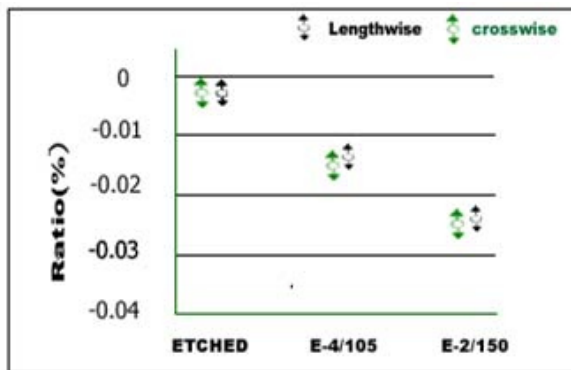
D= Temperature conditioning immersion in distilled water. 浸在恒溫的水中處理

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

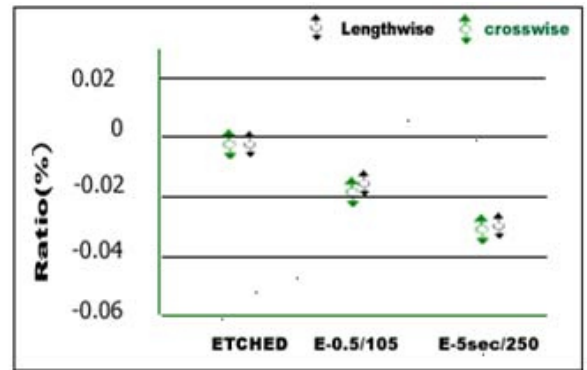
#### 覆銅箔環氧玻纖布層壓板

#### Speciality Chart 板材特性圖

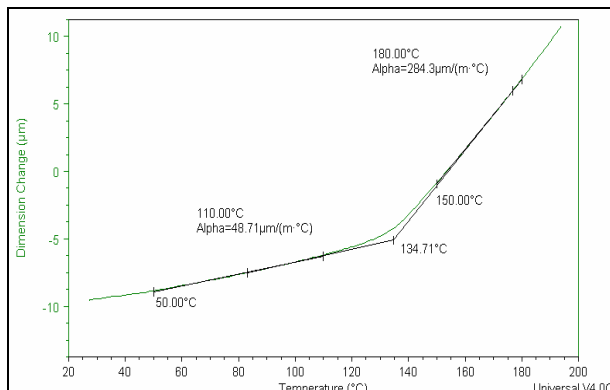
Dimensional stability 尺寸穩定性



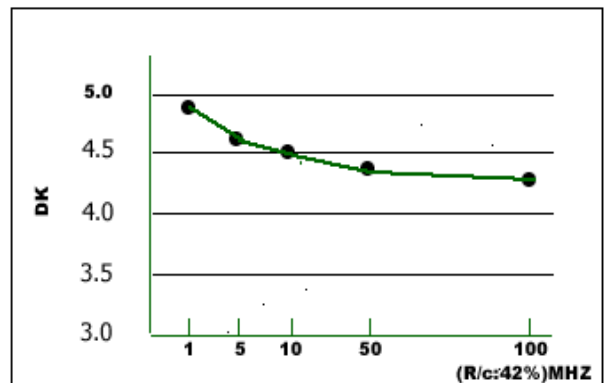
Dimensional stability-PCB process (size:360\*310mm)



Thermal expansion of Z-direction (test by TMA)



Dielectric constant 介電常數



#### Purchasing Information / 採購資訊

Base colour 基板顏色	Thickness 厚度	Copper Cladding 銅箔厚度	Regular Size (mm) 常規尺寸	CTI Value CTI 值
自然色 nature 黑色 black	0.05mm ~ 3.5mm	12 µ m, 18 µ m, 35 µ m, 70 µ m, 105 µ m	1092*1245mm (43 " *49 " ) 940*1245mm (37 " *49 " ) 1041*1245mm (41 " *49 " )	KB-6150:( CTI150 CTI175) KB-6150C:(CTI600 CTI300)

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

可根據客戶要求提供其他尺寸和厚度.