

### TECHNICAL INFORMATION 技術資料

#### KB-6160

KB-6160 是具有紫外線阻擋功能的環氧玻璃布基覆銅板，其他性能與KB-6150相當，適用於有雙向同時感光固化阻焊油墨 (UV) 和光學自動檢查 (AOI) 要求的線路板上。

KB-6160 is glass fabric based epoxy resin copper clad laminate which has UV blocking function and has equal performance as KB-6150. It is suitable for printed circuit board that required UV blocking and AOI (automatic optical inspection) function.

Type 型號	Grade 級別	Construction 組成
KB-6160	ANSI (NEMA) FR-4	玻璃布、環氧樹脂、銅箔 Glass fabric, Epoxy resin, Copper foil

#### Features 特點

- 紫外光阻擋性**  
**UV Blocking**  
 0.8mm的板材UV透過率在0.5%以下,能有效地阻擋紫外線通過。  
 Board with a thickness of 0.8mm could effectively block UV radiation with less than 0.5% UV penetration.
- 良好的機械強度**  
**Excellent mechanical performance**  
 具有良好的抗張、抗彎及抗沖性能。  
 Good performance in dimension thickness.
- 良好的耐濕、熱性**  
**Excellent heat and moisture resistance**  
 在濕、熱條件下能有效抵抗離子遷移,能經受加嚴的濕、熱沖擊而不會產生白斑。  
 Resistance of ion-migration is effective in hot and humid environment. "Measling" would not occur in stringent condition of hot and moisture.

#### Standard Configuration 標準數據

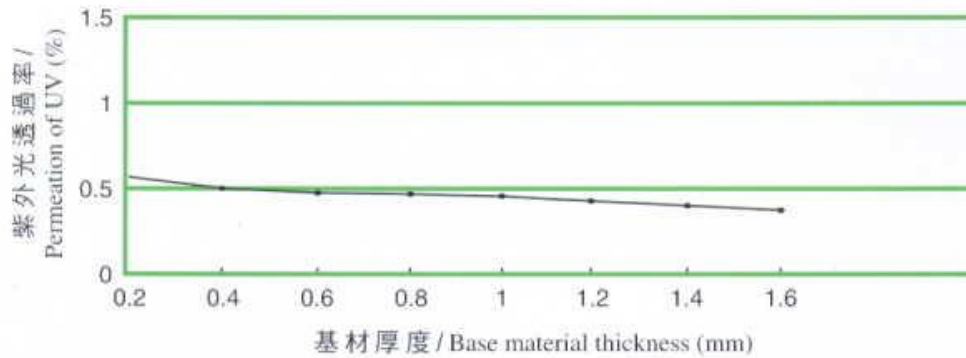
- Thickness 厚度** : 0.1 mm - 3.2mm
- Copper Cladding 銅箔厚度** : 18  $\mu$ m, 35  $\mu$ m, 70  $\mu$ m
- Regular Size ( mm ) 常規尺寸** : 914 X 1220, 1020 X 1220, 1041 X 1245, 1067 X 1220
- Other Size 其他尺寸** : As specified by customers

### TECHNICAL INFORMATION 技術資料

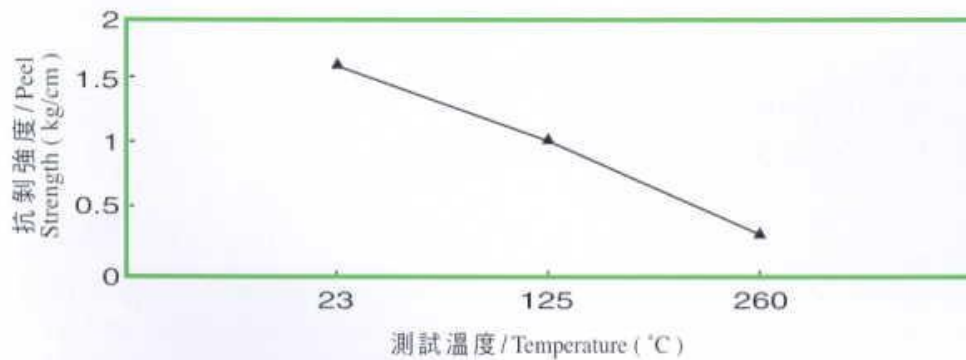
#### KB-6160

#### Performance 表現

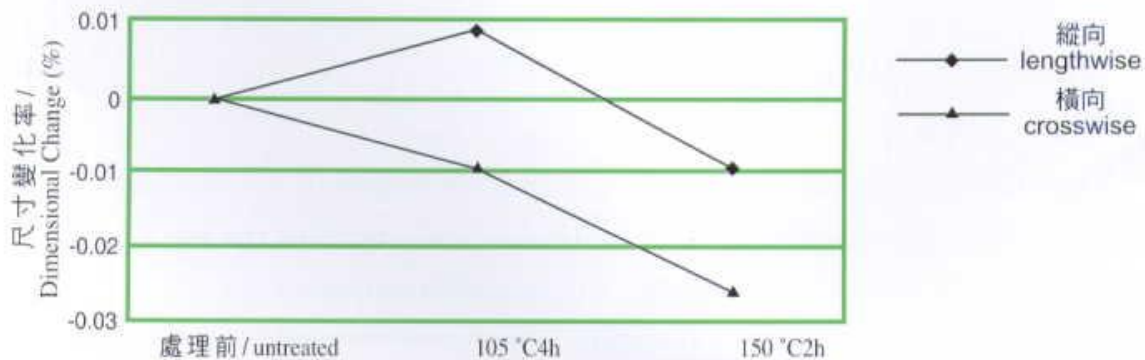
##### 紫外光阻擋功能 UV blocking function



##### 導線抗剝離強度 Peel strength of circuit



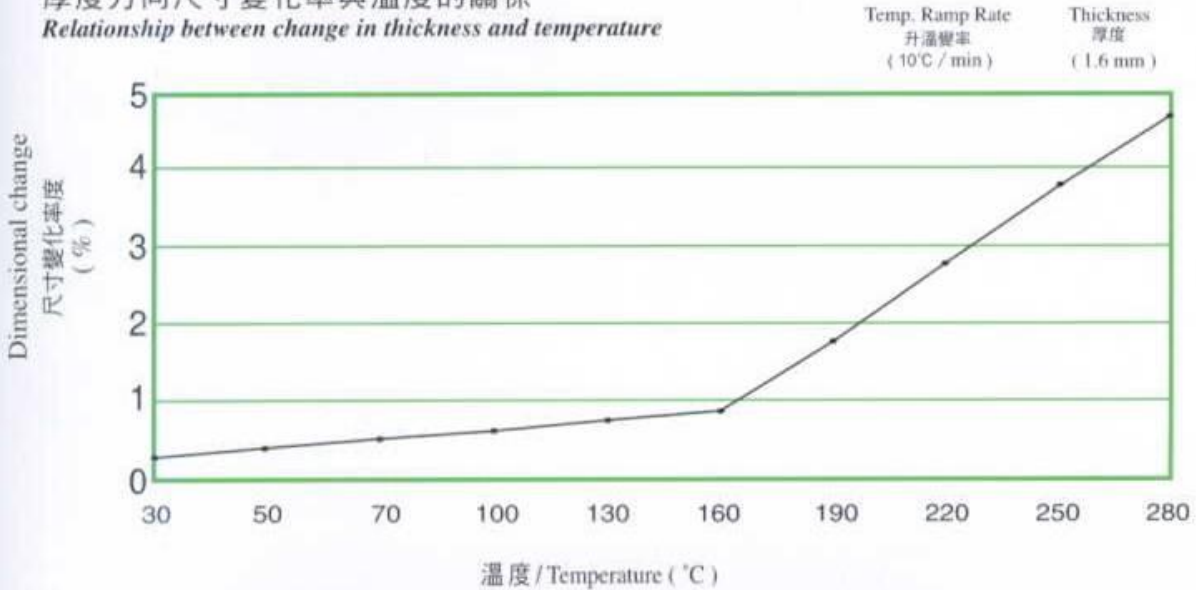
##### 熱處理後板材縱橫向尺寸變化 Dimensional change in cross and length direction after heat treatment.



### TECHNICAL INFORMATION 技術資料

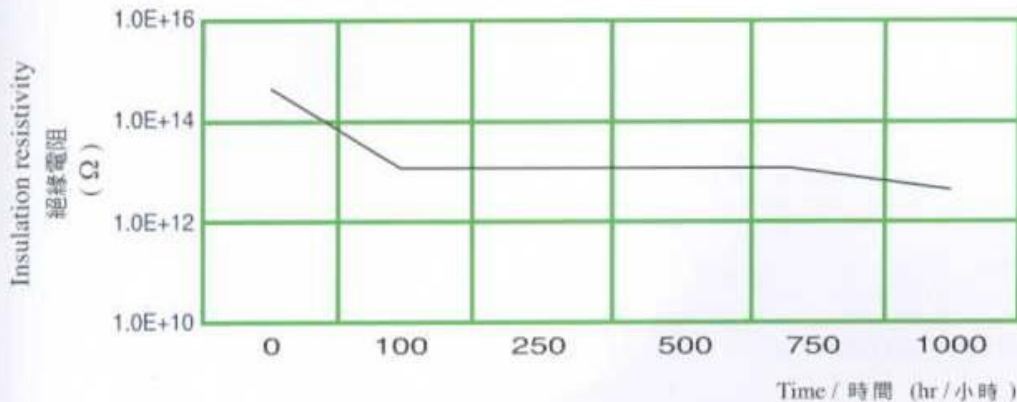
#### KB-6160

厚度方向尺寸變化率與溫度的關係  
*Relationship between change in thickness and temperature*



耐金屬離子遷移性  
*Resistance of ion-migration*

在濕、熱(40°C, RH93%)條件下，施加直流電壓(500V)處理後測定絕緣電阻。  
*Test insulation resistivity after applied with DC 500V in condition of 40°C, RH 93%.*







# 建滔積層板有限公司 KINGBOARD LAMINATES LTD

香港新界沙田火炭坳背灣街 2-12 號威力工業中心五字樓 K 座  
S/E., Block K, Valiant Industrial Centre, 2-12 Au Pui Wan St., Fo Tan, Shatin, NT, Hong Kong.  
TEL : (852) 2605 6493 FAX : (852) 2691 5245 / 2691 0445

## TECHNICAL INFORMATION 技術資料

### KB-6160

#### General Properties 一般特性

Properties 特性	Unit 單位	Test Condition 處理條件	IPC-4101 Testing Method IPC-4101測試方法	IPC-4101 Requirement IPC-4101要求	Typical Value 典型值
Flexural Strength 屈曲強度	Kg/m <sup>2</sup>	Lenghtwise Crosswise	2.4.4	above 4.23 X 10 <sup>7</sup> above 3.52 X 10 <sup>7</sup>	5.58 X 10 <sup>7</sup> 4.54 X 10 <sup>7</sup>
Peel Strength (1 oz) 抗剝強度 (1安士)	Kg/cm	A	2.4.8	above 1.43	2.0
Glass Transition (Tg) 玻璃化轉變度	°C	E2 / 105 DSC	2.4.25	above 130	135
Flammability 耐燃性	Sec/秒	E24 / 23	2.3.10	Average Burn ≤ 5 Max Burn ≤ 10	1.6 7.0
Thermal Stress 耐焊性	Sec/秒	Float 288°C	2.4.13.1	above 20	above 180
Surface Resistance 表面電阻	MΩ	C96/35/90	2.5.17.1	above 1.0 X 10 <sup>4</sup>	1.0 X 10 <sup>6</sup>
Volume Resistivity 體積電阻	MΩ-cm	C96/35/90	2.5.17.1	above 1.0 X 10 <sup>6</sup>	1.0 X 10 <sup>9</sup>
Permittivity 介電常數	—	Etched/@1MHZ	2.5.5.3	less than 5.4	4.6
Loss Tangent 介質損耗	—	Etched/@1MHZ	2.5.5.3	less than 0.035	0.02
Moisture Absorption 吸水性	%	D24/23	2.6.2.1	less than 0.5	0.1

Remarks: Typical values for reference only

註：典型值只作參考