

# KB-6160 /KB-6060 KB-6160A /KB-6060A

UL: E123995

## Conventional FR-4 普通Tg130玻纤布覆铜板

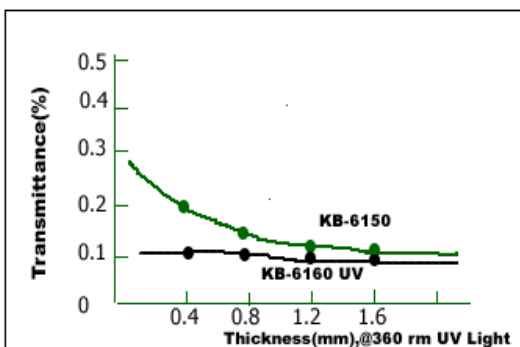
### ◎特性(Feature)

- 兼容紫外光阻挡及光学自动检查功能  
UVB and AOI (automatic optical inspection) compatible
- 优异的尺寸稳定性  
Excellent dimensional stability
- 优良的耐热性能和机械性能  
Excellent heat resistance and mechanical properties
- 符合IPC-4101E/21的规范要求  
IPC-4101E/21 specification is applicable

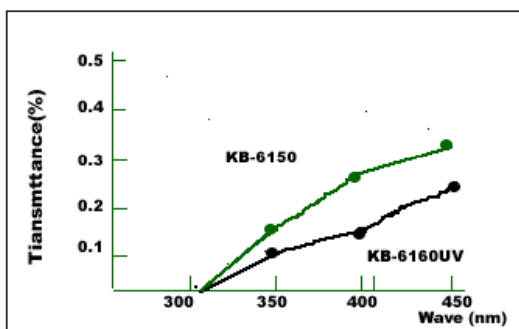
### ◎应用(Application)

- 仪器仪表  
Instruments
- 消费电子  
Consumer electronics
- 通讯设备等  
Communication equipment etc.

### ◎板材性能(Laminate properties)



UV Blocking (Thickness)



UV Blocking (Wave/UV-3100)

Test Item 测试项目	Unit 单位	Typical Value 典型值	Test Method (IPC-TM650)
Thermal Stress热应力	Sec	≥180	2.4.13.1
Glass Transition (Tg) 玻璃化转变温度	°C	132	2.4.25
CTE/ Z-Axis Expansion Z-轴热膨胀系数	ppm/°C	58	2.4.24
	%	286	
T-260	min	10	2.4.24.1
TD	°C	305	2.4.24.6
Flammability燃烧性	Rating	V-0	UL94
Surface Resistivity 表面电阻	MΩ	1.0×10 <sup>6</sup>	2.5.17.1
Volume Resistivity 体积电阻	MΩ-cm	1.0×10 <sup>8</sup>	2.5.17.1
Dielectric Breakdown 介质击穿	kV	69	2.5.6
Dielectric Strength 介质强度	kV/mm	41	2.5.6.2
Dielectric Constant 介电常数@1GHz	—	4.5	2.5.5.2
Loss Tangent 介质损耗@1GHz	—	0.022	2.5.5.2
Arc Resistance 耐电弧性	Sec	125	2.5.1
Peel Strength (1 oz.) 铜箔剥离强度	N/mm	1.7	2.4.8
Flexural Strength 抗弯强度	N/mm <sup>2</sup>	565	2.4.4
		416	
Moisture Absorption 吸水率	%	0.19	2.6.2.1

Remark: 1) All the typical value is based on the 1.6mm(8\*7628) specimen.  
2) Specification sheet: IPC-4101/21, is for your reference only.

◎KB-6160/KB-6160A板材清单(Laminate list)

Thickness 厚度(mil)	Layup 叠构	Thickness 厚度(mil)	Layup 叠构	Size尺寸	Copper foil Type 铜箔类型
2.5	1067×1	10	2165×2	37"×49"	Reverse treated copper foil RTF铜箔：1/3OZ—3OZ
3.0	1080×1, 1086×1	12	1506×2	41"×49"	
4.0	2116×1, 3313×1	16	7628×2	43"×49"	
5.0	2165×1, 1080×2	24	7628×3	74"×49"	
6.0	1506×1, 1080×2	32	7628×4	82"×49"	HTE copper foil HTE铜箔：1/3OZ—3OZ
7.0	7628×1	47	7628×6	86"×49"	
8.0	7628×1	59	7628×8		

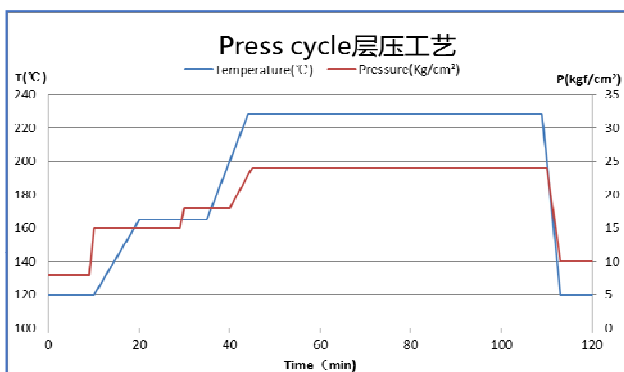
◎KB-6060/KB-6060A半固化片清单(Prepreg list)

UL Designation UL型号	PP style 类型	R/C(%) 树脂含量	GT(s) 胶化时间	Dk(1GHZ) 介电常数	Df(1GHZ) 介质损耗	V/C (%) 挥发物	Thickness(mil) 压合厚度
KB-6060/ KB-6060A	1080	61±3	115±30	3.8±0.2	0.018	≤0.75	2.8±0.4
		63±3	110±30	3.8±0.2	0.019	≤0.75	3.0±0.4
		65±3	105±30	3.7±0.2	0.019	≤0.75	3.2±0.3
	2116	50±3	110±30	4.2±0.2	0.017	≤0.75	4.6±0.5
		53±3	110±30	4.1±0.2	0.019	≤0.75	5.0±0.5
		55±3	105±30	4.1±0.2	0.019	≤0.75	5.3±0.5
	1506	43±3	105±30	4.5±0.2	0.016	≤0.75	6.0±0.5
		45±3	105±30	4.4±0.2	0.016	≤0.75	6.4±0.5
	7628	44.5±3	110±30	4.5±0.2	0.015	≤0.75	7.6±0.6
		46.5±3	105±30	4.5±0.2	0.016	≤0.75	8.2±0.6
		49.5±3	100±30	4.5±0.2	0.016	≤0.75	8.9±0.8

◎KB-6060/KB-6160A半固化片储存(Prepreg storage)

储存条件(Condition)	有效期(Shelf life)
@Max. 50%RH & Max. 23℃ 湿度< 50% 及 温度<23℃	90 days
@Max. 5℃(Normal in room temperature for at least 4h before using) 温度<5℃ (拆包装前需在室温下回温至少4小时)	180 days

◎压合参数(Recommended Process)



- Heat-up rate: 1.5-2.0°C/min (80°C-140°C)  
热压升温速率: 1.5-2.0°C/min (80°C-140°C)
- Curing time:>45min(>175°C)  
固化时间: >45min(>175°C)
- Curing pressure:2.5±0.5Mpa  
(vacuum hydraulic press)  
固化压力:2.5±0.5Mpa (真空液压压机)