

# KB-5150H (ANSI: CEM-1/ High performance)

## 高性能布、纸组合覆铜基板

### Features 特点

- Excellent punching property, Suitable for punching at 45°C~70°C  
优异的冲孔性, 最佳冲孔温度为 45°C~70°C
- Excellent heat and humidity resistance  
良好的耐热性和耐湿性
- IPC-4101E/10 specification is applicable.  
符合 IPC-4101E/10 的规范要求
- Plated through holes are not recommended for the cellulose core is easily attacked by the electrolyte  
不适应 PTH 制程
- Thermal Stress(Float260°C): ≥100s  
热应力(Float260°C): ≥100s

### Applications 应用领域

- Display 显示器
- VCR 录像机
- Power supply 电源基板
- Industrial Instrument 工业仪表
- Digital sound recorder, etc 数码刻录机等

### 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-4101E) 规范值	Typical Value 典型值
<b>Thermal 热性能</b>					
Solder Resistance 耐焊性	Sec	2.4.13.1	Float260°C/unetched	≥10	≥100
			Float288°C/unetched	---	20-30
T260	Min	TMA	---	---	1.5
Z-Axis Expansion Z 轴热膨胀系数	ppm/°C	2.4.24	E-2/105 TMA	---	100/320
	%			---	6.0
Flammability 燃烧性	Rating	UL94	UL-94	V-0	V-0
<b>Electrical 电性能</b>					
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>8</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>9</sup>
Dielectric Constant 介电常数	—	2.5.5.2	Etched/@1 MHZ	≤5.4	4.5
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	126
Comparative Tracking Index 相比漏电起痕指数	V	IEC 60112	Etched/0.1% NH <sub>4</sub> CL	≥200	300
<b>Mechanical 机械性能</b>					
Peel Strength (1 oz.) 铜箔剥离强度	N/mm	2.4.8	125°C	--	1.4-1.6
			Float 260°C / 10 Sec	≥1.05	1.4-1.6
Bow / Twist 弯弓度/翘曲度	%	2.4.22.1	A	≤1.5	0.33/0.37
Flexural Strength 抗弯强度	N/mm <sup>2</sup>	2.4.4	Lenth direction	≥242	380
			Cross direction	≥172	311
Moisture Absorption 吸水率	%	2.6.2.1	D-24/23	≤0.5	0.10

#### Remarks:

Specimen Thickness: 1.6mm 1 / 0 样品厚度: 1.6mm 1 / 0

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