

KB-5150A (ANSI: CEM-1)

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
- KB-5150A CTI≥300V

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<br>测试项目                      | Unit<br>单位        | Test Method<br>(IPC-TM-650)<br>测试方法 | Test Condition<br>处理条件         | Specification<br>(IPC-4101E)<br>规范值 | Typical Value<br>典型值 |
|----------------------------------------|-------------------|-------------------------------------|--------------------------------|-------------------------------------|----------------------|
| Thermal 热性能                            |                   |                                     |                                |                                     |                      |
| Solder Resistance<br>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<br>Z 轴热膨胀系数           | ppm/°C            | 2.4.24                              | E-2/105 TMA                    | ---                                 | 100/320              |
|                                        | %                 |                                     |                                | ---                                 | 6.0                  |
| Flammability<br>燃烧性                    | Rating            | UL94                                | UL-94                          | V-0                                 | V-0                  |
| Electrical 电性能                         |                   |                                     |                                |                                     |                      |
| Surface Resistivity<br>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<br>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<br>介电常数            | —                 | 2.5.5.2                             | Etched/@1 MHZ                  | ≤5.4                                | 4.5                  |
| Loss Tangent<br>介质损耗                   | —                 | 2.5.5.2                             | Etched/@1 MHZ                  | ≤0.035                              | 0.022                |
| Arc Resistance<br>耐电弧性                 | Sec               | 2.5.1                               | D-48/50+D-0.5/23               | ≥60                                 | 126                  |
| Comparative Tracking Index<br>相比漏电起痕指数 | V                 | IEC 60112                           | Etched/0.1% NH <sub>4</sub> CL | ≥250                                | 300                  |
| Mechanical 机械性能                        |                   |                                     |                                |                                     |                      |
| Peel Strength (1 oz.)<br>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<br>弯弓度/翘曲度                 | %                 | 2.4.22.1                            | A                              | ≤1.5                                | 0.33/0.37            |
| Flexural Strength<br>抗弯强度              | N/mm <sup>2</sup> | 2.4.4                               | Lenth direction                | ≥242                                | 380                  |
|                                        |                   |                                     | Cross direction                | ≥172                                | 311                  |
| Moisture Absorption<br>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