

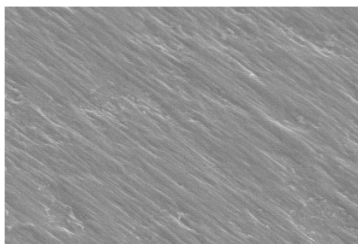
## 普通涂胶铜箔 (ACC)

## 技术特性

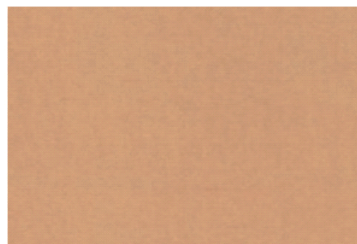
- 采用酚醛树脂改性的聚乙烯醇缩醛树脂做胶粘剂
- 胶膜均匀、无杂质、无渗透孔
- 涂胶箔具有良好的耐浸焊和抗剥性能
- 与纸基结合具有良好的耐热性

## Technical character

- The phenolic resin modified polyvinyl acetal resin is used as adhesive
- Uniform film with no impurities and no penetration hole
- Better dip-soldering resistance and anti-peeling performance than the standard adhesive foil
- Excellent heat resistance when combined with paper-base



光面处理峰型: Peak Type for Shining-treated Side



毛面处理色泽: Colour and Luster for Matte-treated Side

## 备注:

- 适用于民用电子产品及办公自动化设备的电源基板
- 不应在高温（高于30℃）高湿（相对湿度在70%以上）条件环境下长时间贮存
- 试验依据GB/T5230-1995及GB/T4722-92

## Remarks:

- Applicable to the power substrate of civil electronic products and automatic office equipments
- Should not be stored at a high temperature (higher than 30℃) and high humidity (relative humidity above 70%) for a long time
- All tests are based on GB/T5230-1995 and GB/T4722-92

General Properties 一般特性 (10Z/35 $\mu$ )

| 测试项目<br>Test Item                               |                        | 单位<br>Unit         | 处理条件<br>Condition | 测试方法<br>Testing Method | 规范值<br>Specification Value     | 典型值<br>Typical Value |
|-------------------------------------------------|------------------------|--------------------|-------------------|------------------------|--------------------------------|----------------------|
| 纯度(包括银含量)<br>Purity ( Silver Content Included ) |                        | %                  | A                 | IPC-TM-650<br>2.3.15   | ≥99.80                         | 99.95                |
|                                                 |                        |                    |                   |                        | IPC-4562 3.8.1.1               |                      |
| 拉力强度<br>Tensile Strength                        |                        | N/cm <sup>2</sup>  |                   | IPC-TM-650<br>2.4.18   | ≥28000                         | 35000                |
|                                                 |                        |                    |                   |                        | IPC-4562 3.5.1                 |                      |
| 延伸率<br>Elongation                               |                        | %                  |                   | IPC-TM-650<br>2.4.18   | ≥ 4.0                          | 10.0                 |
|                                                 |                        |                    |                   |                        | IPC-4562 3.5.3                 |                      |
| 面积重量<br>Area Weight                             |                        | g/m <sup>2</sup>   |                   | IPC-TM-650<br>2.2.12   | 275-295                        | 285                  |
|                                                 |                        |                    |                   |                        | IPC-4562 3.4.4                 |                      |
| 剥离强度<br>Peeling Strength                        |                        | Kgf/cm             |                   | IPC-TM-650<br>2.4.8    | ≥1.43                          | 1.65                 |
|                                                 |                        |                    |                   |                        | IPC-4562 3.5.4                 |                      |
| 耐焊(260℃)<br>Solder Resistance                   |                        | SEC                | S-260             | IPC-TM-650             | ≥15                            | 20                   |
|                                                 |                        |                    |                   |                        | IPC-4562                       |                      |
| 胶水树脂含量<br>Adhesive Resin Content                |                        | g/m <sup>2</sup>   | E-0.5/160         | IPC-TM-650             | 16-22                          | 18                   |
| 胶水含挥发物比率<br>volatile Content in Adhesive        |                        | %                  | E-0.5/160         | IPC-TM-650             | 1.5-5.0                        | 3.5                  |
|                                                 |                        |                    |                   |                        |                                |                      |
| 高温抗氧化性<br>Heat Resistance                       |                        | /                  | E-30/200          | IPC-TM-650             | S面 不氧化                         | OK                   |
|                                                 |                        |                    |                   |                        | M面 不变色                         |                      |
| 可蚀刻性<br>Etch ability                            |                        | /                  | A                 | IPC-TM-650<br>2.3.6    | 金属箔表面处理, 应能正常的蚀刻工艺除去           | OK                   |
|                                                 |                        |                    |                   |                        | IPC-4562 3.6.1                 |                      |
| 可焊性<br>Solder ability                           |                        | /                  |                   | IPC-TM-650<br>2.4.12   | 不应有焊料不润湿的迹象                    | OK                   |
|                                                 |                        |                    |                   |                        | IPC-4562 3.6.3                 |                      |
| 质量电阻率<br>Surface Resistivity                    |                        | Ω.g/m <sup>2</sup> | C96/35/90         | IPC-TM-650<br>2.4.14   | ≤0.162                         | 0.158                |
|                                                 |                        |                    |                   |                        | IPC-4562 3.8.12                |                      |
| 粗糙度<br>Roughness                                | 光面<br>Shining side -Ra | μm                 | A                 | IPC-TM-650<br>2.4.17   | ≤0.43                          | 0.16                 |
|                                                 |                        |                    |                   |                        | IPC-4562 3.5.6                 |                      |
|                                                 | 毛面<br>Matte side-Rz    | μm                 |                   | IPC-TM-650<br>2.4.17   | ≤10.0                          | 7.0                  |
|                                                 |                        |                    |                   |                        | IPC-4562 3.5.6                 |                      |
| 尺寸<br>Size                                      | 宽度<br>Width            | mm                 |                   | GB/T 4721-92 21        | 订单规格 ± 1.6mm<br>IPC-4562 3.4.2 | 2090                 |

Remarks: Typical values for reference only

注:典型值只作参考Stand values according to IPC-4562 规范值参照IPC-4562

A=Maintain original shape, do not make handling 保持原样, 不作处理

C=Temperature and humidity conditioning 在恒温恒湿的空气中处理

E=Temperature conditioning 在恒温的空气中处理

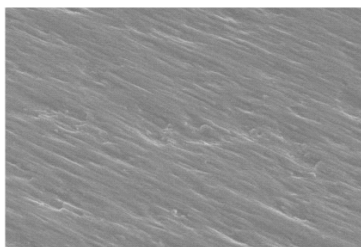
## CTI涂胶铜箔 (CTI)

## 技术特性

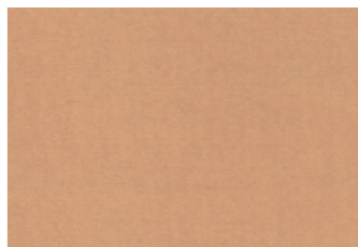
- 采用酚醛树脂改性的聚乙烯醇缩醛树脂做胶粘剂
- 胶膜均匀、无杂质、无渗透孔
- 比普通涂胶箔具有更好的耐浸焊和抗剥性能
- 与纸基结合具有良好的耐热性
- 具有在高压（600V）无漏电起痕特性

## Technical character

- The phenolic resin modified Polyvinyl alcohol acetal resin is used as adhesive
- Uniform film with no impurities and no penetration hole
- Better dip-soldering resistance and anti-peeling performance than the ordinary adhesive coated foil
- Excellent heat resistance when combined with paper-base
- No Proof tracking under high-voltage (600V)



光面处理峰型: Peak Type for Shining-treated Side



毛面处理色泽: Colour and Luster for Matte-treated Side

## 备注:

- 适用于高端民用电子产品及办公自动化设备的电源基板
- 不应在高温（高于30℃）高湿（相对湿度在70%以上）条件环境下长时间贮存
- 试验依据GB/T5230-1995及GB/T4722-92

## Remarks:

- Applicable to the power substrate of high-end civil electronic products and automatic office equipments
- Should not be stored at a high temperature (higher than 30℃) and high humidity (relative humidity above 70%) for a long time
- All tests are based on GB/T5230-1995 and GB/T4722-92

General Properties 一般特性 (10Z/35 $\mu$ )

| 测试项目<br>Test Item                               |                        | 单位<br>Unit         | 处理条件<br>Condition | 测试方法<br>Testing Method | 规范值<br>Specification Value | 典型值<br>Typical Value |
|-------------------------------------------------|------------------------|--------------------|-------------------|------------------------|----------------------------|----------------------|
| 纯度(包括银含量)<br>Purity ( Silver Content Included ) |                        | %                  | A                 | IPC-TM-650<br>2.3.15   | ≥99.80                     | 99.95                |
|                                                 |                        |                    |                   |                        | IPC-4562 3.8.1.1           |                      |
| 拉力强度<br>Tensile Strength                        |                        | N/cm <sup>2</sup>  |                   | IPC-TM-650<br>2.4.18   | ≥28000                     | 35000                |
|                                                 |                        |                    |                   |                        | IPC-4562 3.5.1             |                      |
| 延伸率<br>Elongation                               |                        | %                  |                   | IPC-TM-650<br>2.4.18   | ≥ 4.0                      | 10.0                 |
|                                                 |                        |                    |                   |                        | IPC-4562 3.5.3             |                      |
| 面积重量<br>Area Weight                             |                        | g/m <sup>2</sup>   |                   | IPC-TM-650<br>2.2.12   | 275-295                    | 285                  |
|                                                 |                        |                    |                   |                        | IPC-4562 3.4.4             |                      |
| 剥离强度<br>Peeling Strength                        |                        | Kgf/cm             |                   | IPC-TM-650<br>2.4.8    | ≥1.60                      | 1.80                 |
|                                                 |                        |                    |                   |                        | IPC-4562 3.5.4             |                      |
| 耐焊<br>Solder Resistance                         |                        | SEC                | S-260             | IPC-TM-650             | ≥15                        | 20                   |
|                                                 |                        |                    |                   |                        | IPC-4562                   |                      |
| 胶水树脂含量<br>Adhesive Resin Content                |                        | g/m <sup>2</sup>   | E-0.5/160         | IPC-TM-650             | 28-40                      | 31                   |
| 胶水含挥发物比率<br>volatile Content in Adhesive        |                        |                    |                   |                        | %                          | E-0.5/160            |
| 高温抗氧化性<br>Heat Resistance                       |                        | /                  | E-30/200          | IPC-TM-650             | S面 不氧化                     | OK                   |
|                                                 |                        |                    |                   |                        | M面 不变色                     |                      |
| 可蚀刻性<br>Etch ability                            |                        | /                  | A                 | IPC-TM-650<br>2.3.6    | 金属箔表面处理, 应能正常的蚀刻工艺除去       | OK                   |
|                                                 |                        |                    |                   |                        | IPC-4562 3.6.1             |                      |
| CTI值<br>CTI Value                               |                        | V                  |                   | 0.1% NH4Cl             | ≥51滴/600V                  | 60/600               |
|                                                 |                        |                    |                   |                        |                            |                      |
| 质量电阻率<br>Surface Resistivity                    |                        | Ω.g/m <sup>2</sup> | C96/35/90         | IPC-TM-650<br>2.4.14   | ≤0.162                     | 0.158                |
|                                                 |                        |                    |                   |                        | IPC-4562 3.8.12            |                      |
| 粗糙度<br>Roughness                                | 光面<br>Shining side -Ra | μm                 | A                 | IPC-TM-650<br>2.4.17   | ≤0.43                      | 0.16                 |
|                                                 |                        |                    |                   |                        | IPC-4562 3.5.6             |                      |
|                                                 | 毛面<br>Matte side -Rz   | μm                 |                   | IPC-TM-650<br>2.4.17   | ≤10.0                      | 7.0                  |
|                                                 |                        |                    |                   |                        | IPC-4562 3.5.6             |                      |
| 尺寸<br>Size                                      | 宽度<br>Width            | mm                 | GB/T 4721-92 21   | 订单规格 ± 1.6mm           | 2090                       |                      |
|                                                 |                        |                    |                   | IPC-4562 3.4.2         |                            |                      |

Remarks: Typical values for reference only

注:典型值只作参考Stand values according to IPC-4562 规范值参照IPC-4562

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C=Temperature and humidity conditioning 在恒温恒湿的空气中处理

E=Temperature conditioning 在恒温的空气中处理