#### GUANGDONG BOYU 广系博秘



#### ntroduction

**G**uangdong BOYU Electronics Co., Ltd, is a high-tech enterprise which integrates R&D, production, service and one-stop solutions and concentrates on providing high-quality products of Aluminum and Copper Based CCL and special metal CCL to our customers.

The company has been awarded a series of international certifications such as ISO, UL, SGS, IATF16949 and ROHS.

The company is committed to the global market and has successfully exported products to Europe, USA, Southeast Asia and other countries and regions.

The company adheres to the business strategy of "Using the most advanced technology, Training high-quality employees, Manufacturing high-quality products", striving for innovation and contributing to the development of new technology and new materials for the electronic industry.

#### 产品应用

LED backlighting

**L**ED backlighting

普通照明

Regular lighting

消费类电子

**C**onsumer Electronics

电动工具

Power tools

产品特性

高导热特性

High thermal conductivity

出色的耐热性

Excellent heat resistance

符合 RoHS 要求

Meet the RoHS requirements

无卤素板材

Halogen-free

UL E333613

**U**L E333613

符合 UL 94V-0

Comply with UL 94V-0





# AL-01-B10 产品性能表

(Criterion: Typical value is based on specimen of 1.5mm AL \120\mu dielectric just for reference.)

单位 指标值

测试方法

| PROPERTIES                     | TEST METHOD              | UNIT     | INDICATOR | TYPICAL VALUES |
|--------------------------------|--------------------------|----------|-----------|----------------|
| 热性能 THERMAL PROPERTIES         |                          |          |           |                |
| 绝缘层热导率<br>Thermal Conductivity | ASTM D5470               | W/m. K   | _         | 1. 0           |
| 热阻 Thermal Resistivity         | ASTM D5470               | °C*in²/W | _         | 0. 102         |
| 玻璃化温度 TG                       | DSC                      | °C       | _         | 110            |
| 热分解温度 TD                       | TGA(Wt5%loss)            | °C       | ≥360      | 380            |
| 最大操作温度 MOT                     | UL94                     | °C       | _         | 130            |
| 热应力 Thermal Stress             | Solder floating<br>288°C | Minute   | ≥15       | 25             |
| 电性能 ELECTRICAL PROPERTIES      |                          |          |           |                |

| 体积电阻<br>Volume Resistivity  | IPC-TM-650 2.5.17  | MΩ.cm | ≥10° | 10 <sup>8</sup> |
|-----------------------------|--------------------|-------|------|-----------------|
| 表面电阻<br>Surface Resistivity | IPC-TM-650 2.5.17  | MΩ    | ≥10⁴ | 10 <sup>7</sup> |
| 介电常数<br>Dielectric Constant | IPC-TM-650 2.5.5.3 | 1MHz  | _    | 4. 8            |
| 耗损系数<br>Dissipation Factor  | IPC-TM-650 2.5.5.3 | 1MHz  | _    | ≪0.02           |
| 击穿电压<br>Breakdown Voltage   | IPC-TM-650 2.5.6.2 | AC/KV | _    | 5. 0            |
| 耐电弧<br>Arc Resistance       | IPC-TM-650 2.5.1   | Sec   | ≥60  | 120             |

#### 机械性能 MECHANICAL PROPERTIES

| 剥离强度<br>Peel Strength | IPC-TM-650 2.4.8   | Lb/in | ≥8     | 8. 5 |
|-----------------------|--------------------|-------|--------|------|
| 吸水率                   | D-24/23            |       | % ≤1.5 | 0. 5 |
| Moisture Absorption   | IPC-TM-650 2.6.2.1 |       |        |      |

#### 机构评级&阻燃性 AGENCY RATINGS&DURABILITY

| U.L. 可燃性<br>U.L. Flammability | UL94     | Class | V-0  | V-0 |
|-------------------------------|----------|-------|------|-----|
| 相对漏电起痕指数(CTI)                 | IEC60112 | V     | ≥600 | 600 |

**OUR VALUES** Win-Win Globalization Care Cooperation

### 高导热金属基覆铜板

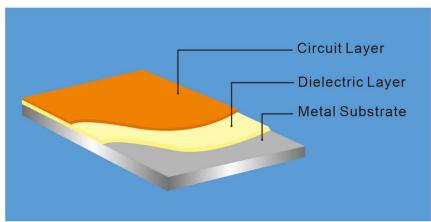
#### **High Thermal Conductivity IMS CCL**

#### 产品介绍

## **Introduction of products**

高导热金属基覆铜板能够针对不同的应用领域要求、各种铜厚、绝缘层特性、不同金属背板的需求,提供符合客户要求的高性价比产品。

For different areas of application requirements, various copper thickness, insulating layer characteristics and the need of different metal backboard, we can provide cost-effective metal based copper clad laminate with high thermal conductivity that meet customers' requirements.



## 产品规格

## **Specification of products**

| Standard BOYU Material Overview |  |               |                     |  |
|---------------------------------|--|---------------|---------------------|--|
| Item                            | Tolerance  | Туре          | AL-01-B10           |  |
| Dielectric Thickness            | ± 10 μm  | Standard      | 120                 |  |
| Dielectric Tillckriess          |  | Special       | 100                 |  |
| Base Copper (µm)                | ± 10% μm   | Standard      | 18、35、70、105        |  |
|                                 |  | Special       | 140、210             |  |
| Aluminum Thickness (mm)         | ± 0.02mm   | Standard      | 0.5-3.0             |  |
|                                 |  | Special       | 3.0-5.0             |  |
| Aluminum Type                   | N/A  | Standard      | 1060、3003、5052      |  |
| Lamiante Size(mm)               | ± 2mm  | Standard      | 1000X1200、1050X1250 |  |
| MOQ request                     | N/A  | Above Special | MOQ 100 sheet       |  |
| Remark:                         | Finish thickness=Aluminum Thickness +Thickness of Thermal Conductive+Base Copper |               |                     |  |

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