



## Global Leading Manufacturer & High Thermal Solutions of Metal Laminate

High Thermal Conductivity IMS/MCCL Datasheet

江西博钰电子有限公司

JiangXi BOYU Electronics CO.,Ltd





## Introduction

JiangXi 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  
 LED backlighting  
 普通照明  
 Regular lighting  
 消费类电子  
 Consumer 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  
 UL 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 \120μm dielectric just for reference.)

性能 PROPERTIES	测试方法 TEST METHOD	单位 UNIT	指标值 INDICATOR	典型值 TYPICAL VALUES
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### 热性能 THERMAL PROPERTIES

绝缘层热导率 Thermal Conductivity	ASTM D5470	W/m.K	—	1.0
热阻 Thermal Resistivity	ASTM D5470	°C*in <sup>2</sup> /W	—	0.176
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 288°C	Minute	≥15	25

### 电性能 ELECTRICAL PROPERTIES

体积电阻率 Volume Resistivity	IPC-TM-650 2.5.17	MΩ.cm	≥10 <sup>6</sup>	10 <sup>8</sup>
表面电阻率 Surface Resistivity	IPC-TM-650 2.5.17	MΩ	≥10 <sup>4</sup>	10 <sup>7</sup>
介电常数 Dielectric Constant	IPC-TM-650 2.5.5.3	1MHz	—	4.6
耗损系数 Dissipation Factor	IPC-TM-650 2.5.5.3	1MHz	—	0.02
耐电压测试 Hi-pot test	T/CPCA4105 B.11	AC/KV	—	5.0
耐电弧 Arc Resistance	IPC-TM-650 2.5.1	Sec	≥60	120

### 机械性能 MECHANICAL PROPERTIES

剥离强度 Peel Strength	IPC-TM-650 2.4.8	Lb/in	≥8	8	
吸水率 Moisture Absorption	D-24/23	%	≤1.5	0.15	
	IPC-TM-650 2.6.2.1				
热膨胀系数 CTE	TMA	< Tg	PPM/°C	—	24
		> Tg	PPM/°C	—	61

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

U.L. 可燃性 U.L. Flammability	UL94	Class	V-0	V-0
相对漏电起痕指数 CTI	IEC60112	V	≥600	600

## 高导热金属基覆铜板

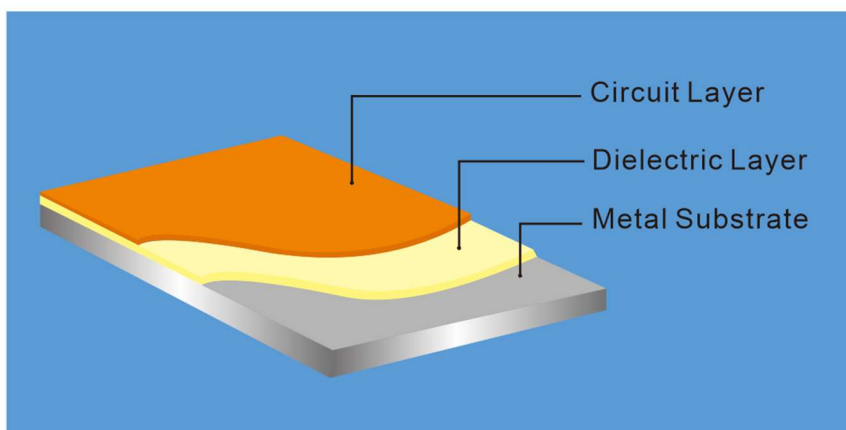
### High Thermal Conductivity IMS CCL

#### 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	Type	AL-01-B10
Dielectric Thickness	$\pm 10 \mu\text{m}$	Standard	100、120、180
		Special	75
Base Copper ( $\mu\text{m}$ )	$\pm 10\% \mu\text{m}$	Standard	18、35、70、105
		Special	140、210
Aluminum Thickness (mm)	$\pm 0.02\text{mm}$	Standard	0.5-3.0
		Special	3.0-5.0
Aluminum Type	N/A	Standard	1060、3003、5052
Laminate Size(mm)	$\pm 2\text{mm}$	Standard	1000X1200、1050X1250、1200X1500
MOQ request	N/A	Above Special	MOQ 100 sheet
Remark:		Finish thickness=Aluminum Thickness + Thickness of Thermal Conductive + Base Copper	

Globalization  
Care  
Cooperation  
Win-Win

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