



Global Leading Manufacturer & High Thermal Solutions of Metal Laminate

High Thermal Conductivity IMS CCL Datasheet

江西博钰电子有限公司

JiangXi BOYU Electronics CO.,Ltd





Introduction

JiangXi BOYU Electronics 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

特殊照明

Special lighting

工控散热方案

Industrial cooling solutions

电源模块

Power Module

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-B20H 产品性能表

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

基板导热率 Product Thermal Conductivity	TO-220	W/m. K	—	2.2			
绝缘层导热率 Thermal conductivity	ASTM D5470	W/m. K	—	1.9			
热阻 Thermal resistivity	ASTM D5470	°C·in ² /W	—	60 μm	75 μm	100 μm	125 μm
				0.049	0.061	0.082	0.102
玻璃化温度 T _g	DSC	°C	—	150			
热分解温度 T _d	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 ⁶	10 ⁸			
表面电阻率 Surface resistivity	IPC-TM-650 2.5.17	MΩ	≥10 ⁴	10 ⁷			
介电常数 Dielectric constant	IPC-TM-650 2.5.5.3	1MHz	—	4.8			
损耗系数 Dissipation factor	IPC-TM-650 2.5.5.3	1MHz	—	0.02			
耐电压测试 Hi-pot	T/CPCA4105 B.11	AC/KV	—	1.5	3.5	4.0	5.0
耐电弧 Arc resistance	IPC-TM-650 2.5.1	S	≥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	%	≤0.5	0.2	
	IPC-TM-650 2.6.2.1				
热膨胀系数 CTE	TMA	< T _g	PPM/°C	—	22
		> T _g	PPM/°C	—	53

机构评级&阻燃性 AGENCY RATINGS&DURABILITY

U.L. 可燃性 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

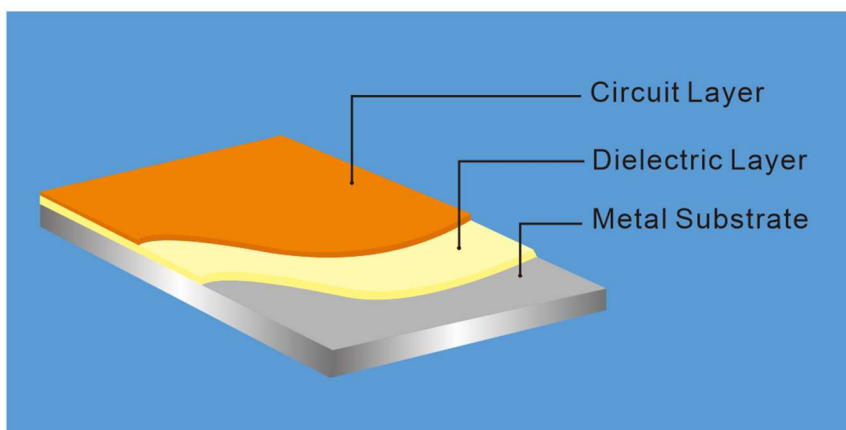
High Thermal Conductivity IMS CCL

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-B20H
Dielectric Thickness	$\pm 10 \mu\text{m}$	Standard	100
Base Copper (μm)	$\pm 10\% \mu\text{m}$	Standard	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	510X610、525X625、500X600、1000X1200、1050X1250
MOQ request	N/A	Above Special	Specified (MOQ 100sheet)
Remark:		Finish thickness=Aluminum Thickness +Thickness of Thermal Conductive+Base Copper	

Globalization
Care
Cooperation
Win-Win

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