

TECHNICAL INFORMATION

KB-3151S (**ANSI** : **FR-1/JIS** : **PP7F**)

覆铜箔酚醛树脂纸基层压板

特点

- 在高温下弓曲率、扭曲率小于 1.0%
- 潮湿环境下电气性能优良
- 适合银浆通孔双面线路板

Features

- In high temperature warpage and twist both less than 1.0%
- Superior electric properties under moisture condition
- Suitable for double side application by silver through hole

General Properties 一般特性

Test Item 测试项目		Unit 单位	Test Condition 处理条件	Testing Method 测试方法	Specification 规格值	Typical Value 典型值
Solder Resistance 耐焊性 (float 260℃)		Sec	A	JIS C 6481	≥10	25~40
Heat Resistance 耐热性			130℃ 30min	JIS C 6481	No Change 无异常	No Change 无异常
Peel Strength (Copper Foil 35 µ m) 铜箔剥离强度 (35 µ m 铜箔)		Kgf/cm	A float 260°C/10Sec	JIS C 6481	≥1.2	1.8~2.1 1.7~2.0
Flexural Strength 屈曲强度	Lengthwise 纵向	Kgf/mm ²	A	JIS C 6481	≥8	15~17
	Crosswise 横向				≥8	14~15
Volume Resistivity 体积阻抗系数		Ωст	C-96/20/65 C-96/20/65+C-96/40/90	JIS C 6481	5×10 ⁹ 5×10 ⁸	$1.0 \times 10^{12} \sim 10^{13}$ $1.0 \times 10^{12} \sim 10^{13}$
Surface Resistivity 表面抗阻	Adhesive Side 粘接剂面	- Ω	C-96/20/65 C-96/20/65+C-96/40/90	JIS C 6481	$1 \times 10^{10} \\ 1 \times 10^{9}$	$1.0 \times 10^{12} \sim 10^{13} \\ 1.0 \times 10^{10} \sim 10^{11}$
	Laminate Side 积层板面		C-96/20/65 C-96/20/65+C-96/40/90		1×10 ¹⁰ 1×10 ⁹	$1.0 \times 10^{12} \sim 10^{13} \\ 1.0 \times 10^{10} \sim 10^{11}$
Insulation Resistance 绝缘抗阻		Ω	C-96/20/65 C-96/20/65+D-2/100	JIS C 6481	1×10 ⁹ 1×10 ⁶	$1.0 \times 10^{12} \sim 10^{13} 1.0 \times 10^{10} \sim 10^{11}$
Chemical Resistance 耐化学性			3% NaOH 40℃ 3min 3%氢氧化钠 40℃3 分钟	JIS C 6481	No change 无异常	No Change 无异常
			Boiled in trichloroethylene for 3 min 三氯乙烯中煮沸 3 分钟	JIS C 6481	No change 无异常	No Change 无异常
Moisture Absorption 吸水率		%	E-24/50+D-24/23	JIS C 6481	€2	0.6~0.8
Flammability 阻燃性		Rating	A	UL94	UL94 V-0	V-0
Dielectric Constant (1 MHz) 介电常数			C-96/20/65 C-96/20/65+D-24/23	JIS C 6481	≤5.5 ≤6.0	4.0~5.0 4.5~5.5
Dissipation Factor 介质损耗因子			C-96/20/65 C-96/20/65+D-24/23	JIS C 6481	≤0.05 ≤0.1	$0.025 \sim 0.035$ $0.035 \sim 0.045$
CTI Value CTI 值		V	0.1% NH ₄ CL	IEC 60112	≥600	≥600
Punching Temperature 冲孔温度		$^{\circ}$	A	GB/T4722	40-70	40-70

Remarks: Typical values for reference only 注: 典型值只作参考 Stand values according to JIS-C-6485 规格值参照 JIS-C-6485

- 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

Website: http://www.kblaminates.com

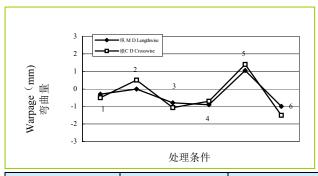
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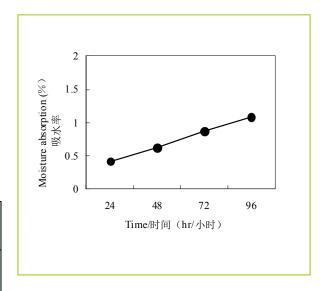
Speciality Chart 板材特性图

Warpage of PCB during processing/印制电路板加工时弯曲度(Thickness 1.6mm single side)



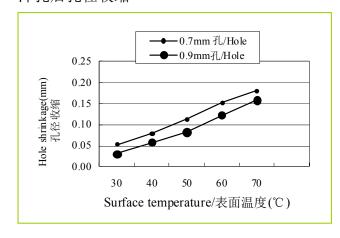
1. Feeding	2.Heating at 130°C	3. Etching.	
投料	for 90 sec	Rinsing. Drying	
	130℃下加热90秒	蚀刻, 清洗, 烘干	
4. Heating at 200 ℃	5.Punching at 50°C	6. Soldering at	
for 30 sec	50℃下冲孔	260°C for 5sec	
200℃下加热 30 秒		260℃ 焊锡 5 秒	

Moisture absorption 吸水率

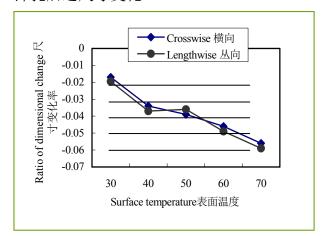


Punched hole shrinkage

冲孔后孔径收缩



Dimensional change of punched PCB 冲孔后之尺寸变化



Purchasing Information 采购信息

Type	Thickness	Copper Cladding	Regular Size(mm)	CTI Value
类型	厚度	铜箔厚度	常规尺寸	CTI 值
KB-3151S FR-1	0.8mm ~ 1.6mm	18μm 35μm 70μm	1020*1020mm (40"* 40") 1020*1220mm (40"* 48")	600V

Note: Other sheet size and thickness could be available upon request.

可根据客户要求提供其它尺寸和厚度