

TECHNICAL INFORMATION

KB-3151C (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%
- 高耐漏电起痕指数 (600 伏以上, 需提出特殊要求)
- 适合之冲孔温度为 40~70℃

Features

- In high temperature warpage and twist both less than 1.0%
- High CTI Value (CTI Over 600V need special request)
- Suitable for punching at 40~70°C

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	20~30
Heat Resistance 耐热性			190℃ 30min	JIS C 6481	190℃ 30min 无异常	200℃ 30min 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 1.8~2.1
Flexural Strength 屈曲强度	Lengthwise 纵向 Crosswise 横向	kgf/mm ²	A	JIS C 6481	≥8 ≥8	14~16 13~14
Volume Resistivity 体积阻抗系数	Volume Resistivity		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 Laminate Side 积层板面	Ω	C-96/20/65 C-96/20/65+C-96/40/90 C-96/20/65 C-96/20/65+C-96/40/90	JIS C 6481	$ \begin{array}{c} 1 \times 10^{10} \\ 1 \times 10^{9} \\ 1 \times 10^{9} \\ 1 \times 10^{7} \end{array} $	$1.0 \times 10^{11} \sim 10^{12} 1.0 \times 10^{10} \sim 10^{11} 1.0 \times 10^{10} \sim 10^{11} 1.0 \times 10^{9} \sim 10^{10}$
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	$1.0 \times 10^{11} \sim 10^{12} 1.0 \times 10^8 \sim 10^9$
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	0.8~1.0
Flammability 阻燃性		Rating	A	UL94	UL94 V-0	V-0
Dielectric Constant (1 MHz) 介电常数 (1 MHz)			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	0.025~0.035 0.045~0.055
CTI Value CTI 值		V	0.1% NH₄CL	IEC 60112	≥175 ≥600	175 600
Punching Temperature 冲孔温度		$^{\circ}$ C	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

Version: 5.1

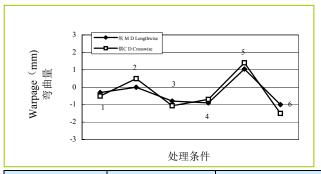
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Speciality Chart 板材特性图

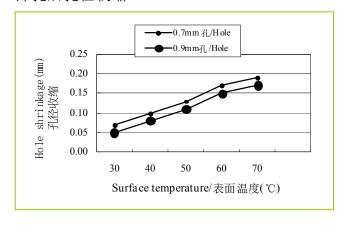
Warpage of PCB during processing/印制电路板加工时弯曲度(Thickness 1.6mm single side)



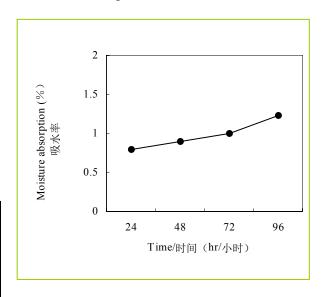
1.Feeding	2.Heating at 130°C	3.Etching.	
投料	for 90 sec	Rinsing. Drying	
	130℃下加热90秒	蚀刻, 清洗, 烘干	
4.Heating at 200°C	5.Punching at 50°C	6.Soldering at	
for 30 sec	50℃下冲孔	260°C for 5sec	
200℃下加热 30 秒		260℃ 焊锡 5 秒	

Punched hole shrinkage

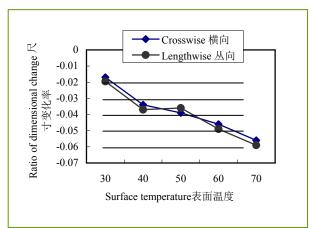
冲孔后孔径收缩



Moisture absorption 吸水率



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-3151C FR-1	0.8mm ~ 1.6mm	18μm 35μm 70μm	1020*1020mm (40"* 40") 1020*1220mm (40"* 48")	175/600V

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;

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