

KB-6167 (ANSI: FR-4)

覆铜箔环氧玻纤布层压板

Features 特点

- Tg 170°C (DSC 测试), 低 Z-轴 CTE 值/ 170°C (By DSC), low Z-axis expansion.
- 热裂解温度高/ High Temperature of Decomposition.
- 优良的耐热性, 满足无铅制程要求/Excellent heat resistance and appropriate for lead-free assembly.
- 符合 IPC-4101C/129 的规范要求/ IPC-4101C/129 specification is applicable .
- 非双氰胺固化体系, 不含填料/ Dicy –free and no filler.
- 良好的耐金属离子迁移性/ ANTI-CAF.

General Properties 一般特性

Test Item 测试项目	Unit 单位	Test Method (IPC-TM-650) 测试方法	Test Condition 处理条件	Specification (IPC-4101C) 规格值	Typical Value 典型值
Peel Strength (1 oz.) 铜箔剥离强度	N/mm	2.4.8	125°C	AABUS	1.30
			Float 288°C / 10 Sec	AABUS	1.25
Flammability 燃烧性	Rating	UL94	E-24/23	UL94 V-0	V-0
Glass Transition (Tg) 玻璃化转变温度	°C	2.4.25	E-2/105 DSC	≥170	175
Surface Resistivity 表面电阻	MΩ	2.5.17.1	C-96/35/90	≥1.0×10 ⁴	1.0×10 ⁷
Volume Resistivity 体积电阻	MΩ-cm	2.5.17.1	C-96/35/90	≥1.0×10 ⁶	1.0×10 ⁹
Dielectric Breakdown 介质击穿	kV	2.5.6	D-48/50+D0.5/23	≥40	70
Dielectric Strength 介质强度	kV/mm	2.5.6.2	D-48/50+D0.5/23	≥29	44
Dielectric Constant 介电常数	—	2.5.5.2	Etched/@1 MHZ	≤5.4	4.65
Loss Tangent 介质损耗	—	2.5.5.2	Etched/@1 MHZ	≤0.035	0.018
Moisture Absorption 吸水率	%	2.6.2.1	D-24/23	≤0.35(min0.51)	0.15
				≤0.80(max0.51)	0.25
Flexural Strength 抗弯强度	N/mm ²	2.4.4	Warp	≥415	589
			Fill	≥345	456
Arc Resistance 耐电弧性	Sec	2.5.1	D-48/50+D0.5/23	≥60	125
CTE/Z-Axis Expansion Z-轴热膨胀系数	ppm/°C	2.4.24	E-2/105 TMA	≤60/300	46/267
	% (50-260°C)			≤3.0	2.8
CTI	V	IEC 60112	Etched/0.1% NH ₄ CL	≥175	175
TD	°C	2.4.24.6	TGA	≥340	357
CAF	H	-	85%, 85°C, 50V DC	≥1000	1000
T-260	min	2.4.24.1	TMA	≥30	50
T-288	min	2.4.24.1	TMA	≥15	30

Remarks: Typical values for reference only 注: 典型值只作参考 Specimen Thickness: 1.6 mm

样品厚度: 1.6 mm

A = Keep the specimen originally without any process 保持原样, 不作处理

C = Temperature and humidity conditioning 恒温恒湿的空气中处理

D = Immersing in distilled water with temperature control 恒温的水中处理

E = Temperature conditioning 恒温空气中处理

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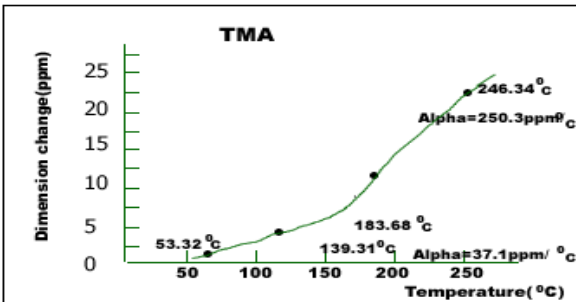
环氧玻纤布覆铜层压板

Other data for references 其它数据(仅供参考)

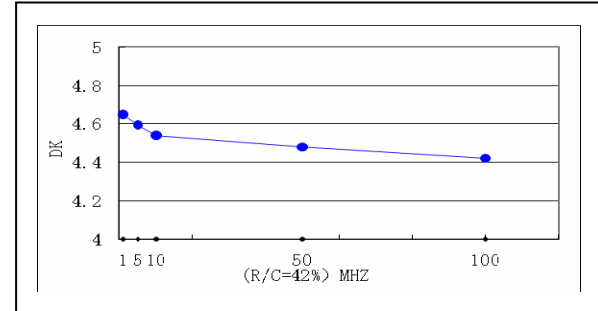
Item		Unit	Typical Value	Item		Unit	Typical Value
Young's modulus	Warp	Million	3.5	Poisson's ratio	Warp	--	0.13
	Fill	psi	3		Fill	--	0.12
Tailors modulus	Warp	Million	3.2	Tensile strength	Warp	N/mm ²	380
	Fill	psi	3		Fill		260

Speciality Chart 板材特性图

CTE Z 轴热膨胀系数 (test by TMA)



Dielectric constant 介电常数



Applications 应用领域

- Computer, communication equipment, instrument, OA equipment, etc.
计算机及外围设备、通讯设备、仪器仪表、办公自动设备等

Purchasing Information 采购信息

Base Color 基板颜色	Thicknesses 厚度	Copper Cladding 铜箔厚度	Regular Sizes 常规尺寸
黄色 Yellow	0.05mm ~ 3.2mm	18μm /35μm 70μm /105μm	915*1220mm (36"*48") 1020*1220mm (40"*48") 1067*1220mm (42"*48")

Note: 1) 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;
2) Speciality chart for reference only. 以上图表仅供参考;
3) Version updates without notice. 版本更新恕不另行通知。