

KB-6165GC Halogen-free Tg150 CTI600 (ANSI: FR-4.1)

无卤素玻纤布覆铜层压板

特点

- 无溴、无锑，废弃物燃烧时无毒性物质产生
- 适用于多层板无铅制程
- 最小 Tg 值 150°C (DSC)
- 优良的耐热性能, T288>50min, T300>30min, Td>360°C
- 较低的 CTE (Z-axis)
- 较低的吸水率
- 优良的耐离子迁移性能
- 电气性能与普通 FR-4 相似

Features

- No bromine and Antimony-free, no toxic evolution during waste burning
- Suitable for multi-layer lead-free process
- Min Tg 150°C (DSC)
- High thermal resistance, T288>50min, T300>30min, Td>360°C
- Low CTE (Z-axis)
- Low moisture absorption
- Excellent CAF resistance
- Electrical properties similar to FR-4

General Properties 一般特性

Test Item 测试项目	Unit 单位	Test Condition 处理条件	Specification (IPC-4101D) 规格值	Typical Value 典型值
Peel Strength (1 oz.) 铜箔剥离强度	N/mm	A	≥1.05	1.55
Thermal Stress 热应力	Sec	Float 288°C/unetched	≥10	>240
Flexural Strength 抗弯强度	LW/纵向	A	≥415	488
	CW/横向		≥345	415
Flammability 燃烧性	Rating	E-24/23	UL94 V-0	V-0
Glass Transition (Tg) 玻璃转化温度	°C	E-2/105 DSC	≥150	151.87
Surface Resistivity 表面电阻	MΩ	After moisture resistance	≥1.0×10 ⁴	2.5×10 ⁷
Volume Resistivity 体积电阻	MΩ-cm	After moisture resistance	≥1.0×10 ⁶	8.5×10 ⁷
Dielectric Breakdown 介质击穿	KV	D-48/50+D0.5/23	≥40	42.8
Dielectric Constant 介电常数	—	C-24/23/50	≤5.4	4.6
Loss Tangent 介质损耗	—	C-24/23/50	≤0.035	0.017
TD	°C	TGA(5% Wt Loss, 10°C/min)	>325	384.15
Moisture Absorption 吸水率	%	D-24/23	≤0.5	0.19
CTE/Z-Axis Z-轴热膨胀系数	Before Tg	E-2/105 TMA	<60	31.6
	After Tg		<300	212.6
CTI	V	Etched/0.1% NH ₄ CL	≥600	≥600
T288	min	TMA	≥10	>50
T300	min	TMA	≥2	50.48
Cl Content (Resin Contents=43.0%)	ppm	---	≤900	≤350
Br Content (Resin Contents=43.0%)	ppm	---	≤900	ND

Remarks:

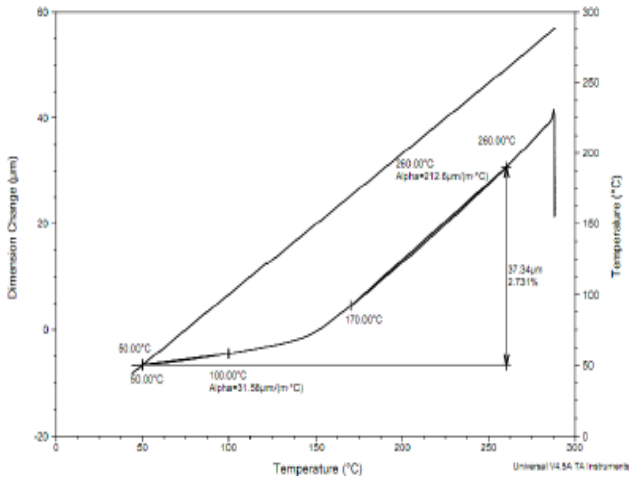
- A = Keep the specimen originally without any process 保持原样, 不作处理
 C = Temperature and humidity conditioning 在恒温恒湿的空气中处理
 D = Immersing in distilled water with temperature control 浸在恒温的水中处理
 E = Temperature conditioning 在恒温的空气中处理
 ND = Not Detected. 未检测出

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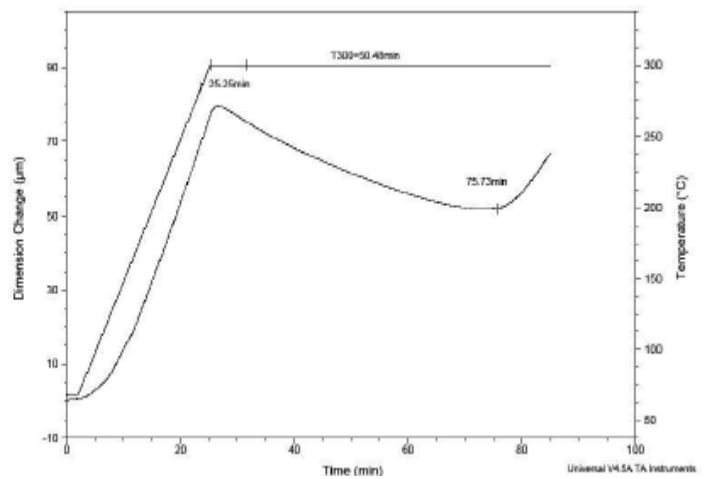
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Speciality Chart 板材特性图

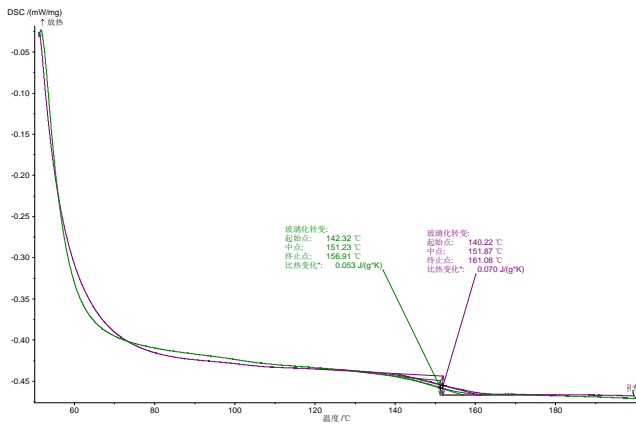
Lower CTE(Z-axis)



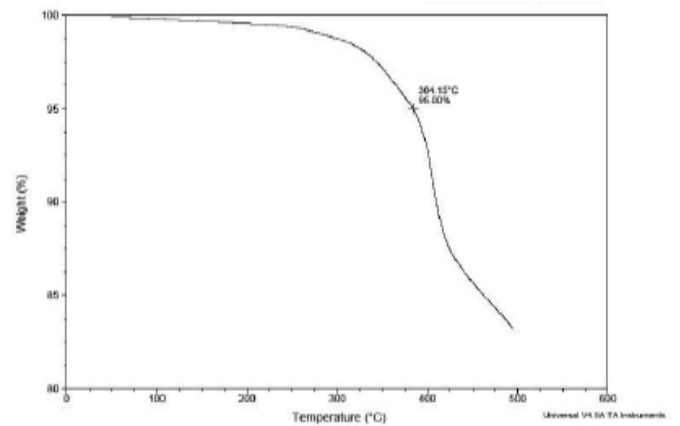
Long De-lamination Time: TMA-T300=50.48min



Tg(DSC)=151.87°C



High Td:TGA-Td(5% Wt Loss,10°C/min)=384.15°C



Applications 应用领域

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

Purchasing Information 采购信息

Base Color 基材颜色	Thickness 厚度	Copper Cladding 铜箔厚度	Regular Size (mm) 常规尺寸	CTI Value CTI 值
淡黄色 Pale Yellow	0.2mm ~ 1.6mm	18µm 35µm 70µm	915*1220mm (36"*48") 1020*1220mm (40"*48") 1067*1220mm (42"*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