

KB-6165GMD Halogen Free Middle Dk&Df (ANSI:FR-4.1)

覆铜箔环氧玻纤布层压板

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
- 优良的耐离子迁移性能和优良的耐热性能, T288>60min, Td>390℃
- 超低的 CTE (Z-axis), 较低的吸水率
- 具有中等 Dk&Df

Features

- No bromine and Antimony-free, no toxic evolution during waste burning, Suitable for multi-layer lead-free process
- Excellent CAF resistance and high thermal resistance, T288>60min, Td>390℃
- Low CTE(Z-axis) and low moisture absorption
- Middle Dk&Df

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-4101D) 规格值	Typical Value 典型值
Peel Strength (1 oz.) 铜箔剥离强度	N/mm	2.4.8	A	≥1.05	1.53
Moisture Absorption 吸水率	%	2.6.2.1	D-24/23	≤0.5	0.11
Dielectric Breakdown 介质击穿	kV	2.5.6	D-48/50+D-0.5/23	≥40	42.9
Flexural Strength 抗弯强度	LW	2.4.4	A	≥415	475
	CW			≥345	425
Flammability 燃烧性	-	UL94	UL-94	V-0	V-0
Glass Transition (Tg) 玻璃化转变温度	℃	2.4.25	DSC	150	150
Surface Resistivity 表面电阻	MΩ	2.5.17.1	After moisture resistance	≥10 ⁴	3.6×10 ⁷
Volume Resistivity 体积电阻	MΩ-cm	2.5.17.1	After moisture resistance	≥10 ⁶	8.8×10 ⁷
Z-Axis Expansion	Before Tg	2.4.24	TMA	<60	31.14
	After Tg			<300	235.5
Thermal shock 热冲击	s	---	288℃, 20s	no delamination	>240
Pressure Cooker Test 压力容器实验	s	---	1.5atm/2hr/288℃ Dipping	no delamination	>180
Cl Content (Resin Contents=43.0%)	ppm	---	---	≤900	310
Br Content (Resin Contents=43.0%)	ppm	---	---	≤900	Not detected
CTI	V	---	---	≥175	200
T288	min	2.4.24.1	TMA	≥10	>60
TD	℃	2.4.24.6	TGA (5%Wt Loss, 10℃/min)	>325	396.38

Remarks: Specimen Thickness: 1.6mm, Copper foil thickness: 1oz 样品厚度: 1.6mm, 铜箔厚度: 1oz

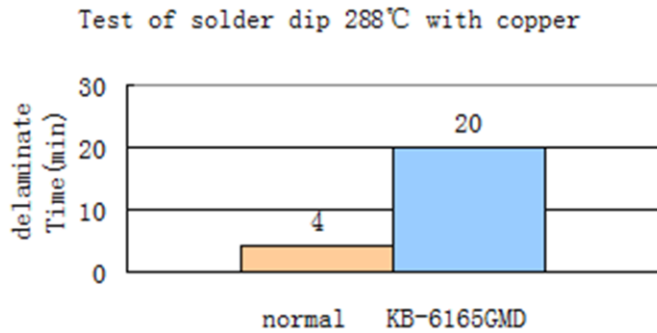
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介电常数与损耗因数

	1M	1G	3G	5G	10G
Dk	4.15	4.0	3.95	3.94	3.91
Df	0.009	0.01	0.01	0.011	0.012

High thermal resistance



Application 应用领域

- Computer, VCR, Instrument, Communication equipment et.
计算机、摄像机、仪器仪表、通讯设备等

Purchasing Information 采购信息

Base Color 基板颜色	Thickness 厚度	Copper Cladding 铜箔厚度	Regular Size (mm) 常规尺寸	CTI Value CTI 值
自然色 Nature	0.05mm ~ 3.5mm	12μm, 18μm, 35μm, 70μm, 105μm	915*1220mm (36"*48") 1020*1220mm (40"*48") 1067*1220mm (42"*48")	KB-6165GMD: (CTI 200V)

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