

Conventional FR-4/Normal Tg

特性 (Feature)

- 优异的尺寸稳定性
Excellent dimensional stability
- 具有较高的性价比
High cost performance
- 含有填料，不适用于进行冲压工艺；
Containing fillers, not suitable for punching process

应用 (Application)

- 黑白家电，消费性电子
Consumer Electronics
- 简单通讯设备
Simple communication equipment
- 简单仪器仪表
Simple instrument
- 办公自动设备等
OA equipment, etc.

板材性能 (Laminate Properties)

Test Item 测试项目		Test Method (IPC-TM- 650) 测试方法	Test Condition 处理条件		Unit 单位	Typical Value 典型值
Thermal 热性能	Thermal Stress 热应力	2.4.13.1	Float 288 °C / Unetched		Sec	≥180
	Glass Transition (Tg) 玻璃化转变温度	2.4.25	DSC		°C	135
	CTE / Z-Axis Expansion Z-轴热膨胀系数	2.4.24	Alpha 1		ppm/°C	45
			Alpha 2			240
			50 - 260 °C		%	3.6
	T-260	2.4.24.1	TMA		min	> 10
	TD(5% weight loss)	2.4.24.6	TGA		°C	350
Flammability 燃烧性	UL94	E-24/125		Rating	V-0	
Electrical 电性能	Surface Resistivity 表面电阻率	2.5.17.1	C-96/35/90		MΩ	5.3×10 ⁷
	Volume Resistivity 体积电阻率	2.5.17.1	C-96/35/90		MΩ-cm	5.2×10 ⁸
	Dielectric Breakdown 击穿电压	2.5.6	D-48/50+D-0.5/23		kV	≥45
	Dielectric Constant 介电常数	2.5.5.9	Etched (RC50%)	@ 1 MHz	—	4.8
				@ 1 GHz		4.6
	Loss Tangent 介质损耗	2.5.5.9	Etched (RC50%)	@ 1 MHz	—	0.017
				@ 1 GHz		0.018
CTI 相对漏电起痕指数	IEC60112	Etched/0.1% NH ₄ CL		V	≥175	
Arc Resistance 耐电弧性	2.5.1	D-48/50+D-0.5/23		Sec	125	
Mechanical 机械性能	Peel Strength (1 oz.) 铜箔剥离强度	2.4.8	A		N/mm	--
			Float 288 °C / 10 Sec			1.45
	Flexural Strength 弯曲强度	2.4.4	Lengthwise		N/mm ²	560
			Crosswise			450
	Water Absorption 吸水率	2.6.2.1	D-24/23		%	0.10

Remarks:
- Not recommended on multilayer boards, automotive products, high-end instruments and high frequency products.
- Typical Values for reference only.
- Typical Value of Specimen thickness is 1.6mm (#7628*8)
- If applied to denser hole spacing, please conduct an assessment first

-注:
-- 不建议进行多层板、汽车板、特种仪器仪表板、高频板及电表板的加工制作
-- 典型值只供参考
-- 样品的厚度为 1.6mm (#7628*8)
-- 如应用于较密的孔间距，请客户先进行评估

