

产品编号: NY1135

(ANSI: FR-4) Nature

特点

- Tg130℃ (DSC)
- 自然色, 无 UV Blocking/AOI 功能
- 优良的机械加工性能

FEATURES

- Tg130℃ (DSC)
- Natural Color, Non-UV Blocking/AOI
- Excellent mechanical process ability

应用领域

电脑、仪器仪表、摄像机、
电视机、电子游戏机等。

APPLICATIONS

Computer, Communication equipment,
VCR, Television,
Electronic Game Machine, etc.

Copper Clad Laminate Main Technical Properties

性能 Property		试验条件 Pre-treatment	单位 Unit	特性值 Property Date	
				指标 Index	典型值 typical value
表面电阻 Surface resistivity	耐湿后 After moisture resistance	F	MΩ	≥10 ⁴	5.5×10 ⁷
	高温下 At elevated temperature	E-24/125		≥10 ³	5.3×10 ⁶
体积电阻 Volume resistivity	耐湿后 After moisture resistance	F	MΩ.cm	≥10 ⁶	4.8×10 ⁸
	高温下 At elevated temperature	E-24/125		≥10 ³	4.6×10 ⁶
击穿电压(平行板面) Dielectric breakdown (parallel laminations)		D-48/50+D-0.5/23	KV	≥40	42
介电常数(1MHZ) Permittivity at 1MHz		C-40/23/50	-	≤5.4	4.6
介质损耗角正切 Loss tangent at 1MHz		C-40/23/50	-	≤0.035	0.02
耐电弧性 Arc resistance		D-48/50+D-0.5/23	S	≥60	120
剥离强度 35μm 铜箔 Pell strength 35 micron copper	交收态 As received	A	N/mm	≥1.40	1.9
	热应力后 After thermal stress	A		≥1.40	1.7

耐浸焊性 Solder limits		288℃,20S	-	No delaminating	No delaminating
弯曲强度 Flexural strength	纵向 Lengthwise	A	MPa	≥410	600
	横向 Crosswise	A		≥340	500
吸水率 Water absorption		E-1/105+des+D-24/23	%	0.10-0.77 ≤0.80	0.2
				0.78-3.2 ≤0.35	0.15
燃烧性 Flammability		A&E-1/105+des	-	94V-0	94V-0
尺寸稳定性 Dimensional stability		E-4/105+des+E-2/150	PPM	±300	±150
相比漏电起痕指数 CTI		IEC60112 Method	V	175-250 (grade3)	200
玻璃化转换温度 Tg(DSC)		IPC-TM-6502.4.25	℃	≥128	135
Z 轴热膨胀系数 Z-Axis CTE	Before Tg	TMA	um/m℃	-	65
	After Tg			-	310
	50-260 Degrees		%	-	4.5
热分解温度 TD		10℃/min, N2.5% WT loss	℃	-	310
耐热分层时间 (蚀刻后) Thermal resistance (Copper removed)	T260	TMA	Min	-	13
	T288	TMA	Min	-	<1

Remark: All the data listed above can meet IPC-4101/21 requirement

备注:上述列出的指标均符合 IPC-4101/21 标准

Specimen Thickness:1.6mm

标准厚度: 1.6mm

Explanations: A—板材交货阶段

C—恒温恒湿烘箱

D—恒温水浴

E—高温烘箱

F—潮湿条件

说明:

A—CCL inspection for delivery

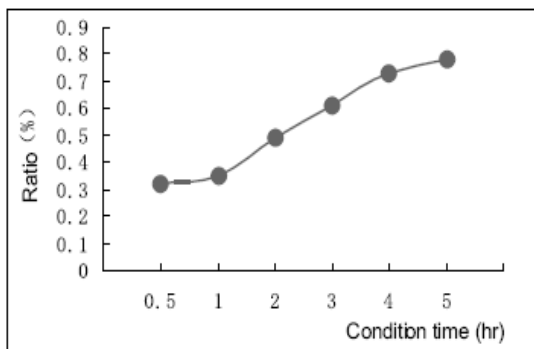
C—stoved at constant temperature and moisture

D—treatment carried out in distilled water at constant temperature

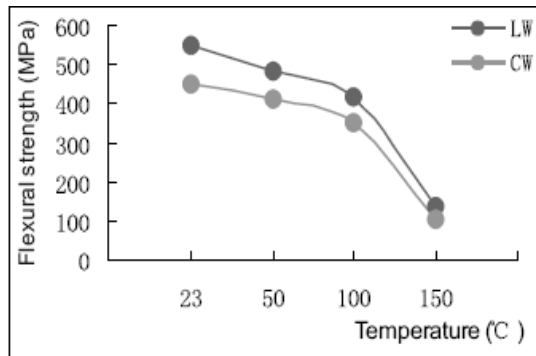
E—stoved at high temperature

F—Humidity conditioning

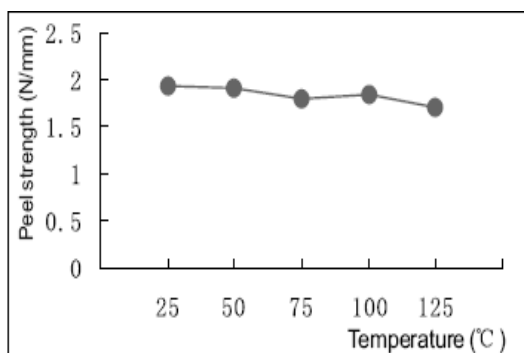
Water absorption at pressure cooker



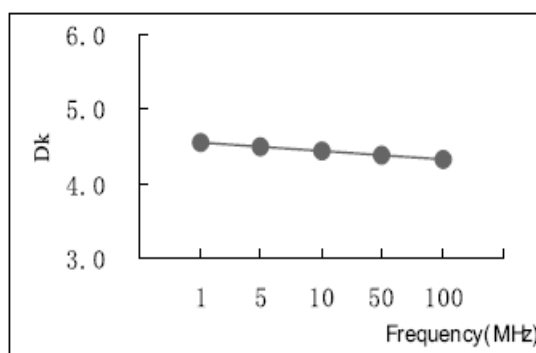
Flexural strength



Peel strength



Dielectric constant



PURCHASING INFORMATION

Thickness Copper	Copper foil	Standard Size
0.05mm to 3.2mm	12µm to 105µm	1,020×1,220mm (40"×48") 915×1,220mm (36"×48") 1,070×1,220mm (42"×48")

Other sheet size and thickness could be available upon request.