

NIKAFLEX®

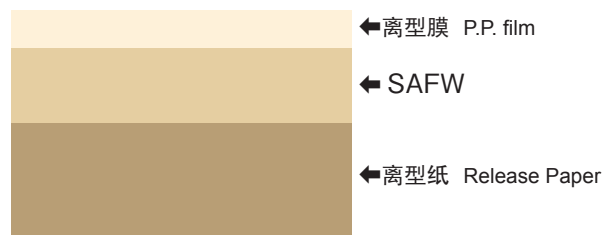
补强板用粘胶片（半固化型）
 (Semicured) Adhesive Sheet for Bonding Polyimide Film Base FPC to Stiffener

SAFW

特点 Features

- 1** 加工方法简单。
 可利用滚筒层压法 + 后固化进行粘合。
 Easy to Process by Roll Lamination plus Postcure.
- 2** 耐湿性优良。
 Excellent Moisture Resistance.
- 3** 最适合用于聚酰亚胺基材柔性电路板和补强板之间的粘合。
 Appropriate for Bonding Polyimide film Base FPC to Stiffener.
- 4** 具有很长的使用寿命。
 Long Shelf Life.

构成 Composition



标准产品规格 Specifications of standard Products

粘合剂 Adhesive	种类 Classification	热硬化性树脂 Thermosetting Resin
	厚度 (μm) Thickness	25, 40
离型材料 Releasing Material on Adhesive Surface		离型膜 Release Film
		离型纸 Release Paper
标准尺寸 (mm) Standard size		500 × Roll (100m)

使用注意事项 Caution

- 1** 粘胶呈半固化状态、如果放置于常温下、则随着时间变化粘合剂会发生硬化。所以必须在低温（3-20℃）且湿度低于70%的条件下进行保管。
 Time and temperature promote a change from the semicured to the fully cured adhesive state, so keep SAFW at 3 to 20°C and at 70%RH or below.
- 2** 质量保证期限
 产品的质量保证期限为交货后6个月。但条件为必须在低于5℃的环境下进行保管。
 Term of Guarantee for Product
 The term of guarantee for the products shall be 6 months deliver products that the products are stored at 5°C or lower.

加工方法示例 An Example of Processing Method

滚筒压合方式

- 1** 使用滚筒压合将粘胶假贴到补强板上。
Temporary Lamination with Stiffener by Roll Laminater.
- | | |
|--------------------------|----------|
| 橡胶滚筒表面温度 | 100°C |
| Roll Surface temperature | 100°C |
| 压合速度 | 1m/min. |
| Lamination Speed | 1M/min. |
| 层压压力 | 0.8kg/cm |
| Lamination Pressure | 0.8kg/cm |
- 2** 后固化
Postcure
- | | |
|--|--------------------------|
| | 80°C 2Hr + 160°C 1Hr |
| | 80°C/2hrs plus 160°C/1hr |

传压方式 Procedures (Press-Bonding)

- 1** 常温下设置
Setting at room temp.
- 2** 抽真空 5次左右
Removing Air (about 5 times)
- 3** 加压 (2 ~ 4MPa)
Apply pressure (2 to 4 MPa)
- 4** 升温
Temp. Elevation
- 5** 升温至 100°C时再次抽真空
Removing Air again at 100°C
- 6** 加压 (2 ~ 4MPa)
Apply pressure (2 to 4 MPa)
- 7** 升温至 160°C时再次抽真空
Removing Air again at 140 to 160°C
- 8** 在 160°C、2 ~ 4MPa 状态下保持 40 ~ 60 分钟
Press-bonding at 140 ~ 160°C under pressure of 2 ~ 4MPa for 40 to 60 min.
- 9** 冷却 Cooling
- 10** 取出 Taking out

SAFW 性能示例 Characteristic of SAFW

试验项目 Test item	单位 Unit	处理条件 Treatment conditions	ロールラミネート方式 Roll Lamination	プレス方式 Press-Bonding	试验方法 Test Method
粘合剂流动性 Resin Flow	mm	A	0.01 (Max.)	0.27 (Max.)	本公司方式 Our Standard
剥离强度 Peel Strength	N/mm	A	1.4	1.5	本公司方式 Our Standard
		药品浸渍处理后 After immersion in chemical	1.0	1.0	
焊接耐热性 Solder Heat Resistance	—	260°C /20sec.	合格 Pass	合格 Pass	IPC-FC-232B
耐水性剥离强度 Water Resistance Peel Strength	kgf/cm	A	0.7	0.7	本公司方式 Our Standard

- Note** (1) 粘合剂流动性、剥离强度、焊接耐热性是将 50 μm 聚酰亚胺薄膜和 FR-4 (无铜板) 用 SAFW40 粘合后获得的值。
Value of Resin Flow, Peel Strength and Solder Heat Resistance are those of Laminate using SAFW 40 as adhesive in press-bonding polyimide film (50μm) with unclad FR-4.
- (2) 耐水剥离强度是用 3%NaOH 溶液在 40°C 条件下对 FPC 基板进行 150 秒处理后、将该基板的薄膜表面和 75 μm 聚酰亚胺薄膜用 SAFW40 粘合后获得的值。
Values of Water Resistance Peel Strength is that of laminate using SAFW 40 as adhesive in press-bonding polyimide film (75μm) with polyimide surface of FPC treated in solution of 3% NaOH at 40°C for 150sec.
- (3) 滚压条件：橡胶滚筒表面温度：100°C、层压速度：1m/min、压力：0.8kg/cm
+ 后固化条件：(80°C 2Hr + 160°C 1Hr)
层压条件 / 温度：160°C、时间：40 分钟、成型压力：40kg/cm²
Roll Lamination Method:
Lamination Conditions Roll surface temperature 100°C
Lamination Speed 1M/min.
Lamination Pressure 0.8kg/cm
plus Postcure (80°C/2hrs plus 160°C/1hr)
Press-Bonding Method: Press conditions (160°C/40min./40kg/cm²)