

# NIKAFLEX®

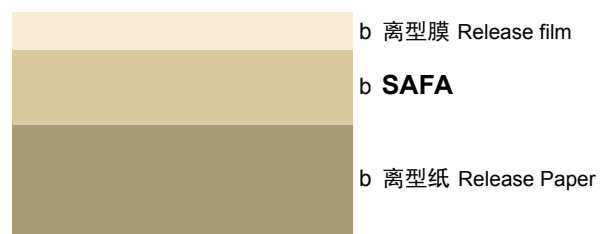
粘胶片（半固化型）  
(Semicured) Adhesive Sheet

## SAFA

### 特点 Features

- 1** 长期耐热性优良、粘合剂变色少。  
 Excellent in heat resistance for a long period of time and less discoloration of adhesive.
- 2** 具有优良的耐离子迁移性。  
 Excellent in ion migration resistance.
- 3** 最适合用于聚酰亚胺基材柔性电路板与补强板之间的粘合。  
 Appropriate for bonding polyimide film base FPC to Stiffener.
- 4** 具有优良的耐水剥离强度。  
 Excellent in water resistance peel strength.

### 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	40
粘合剂表面的保护材料 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

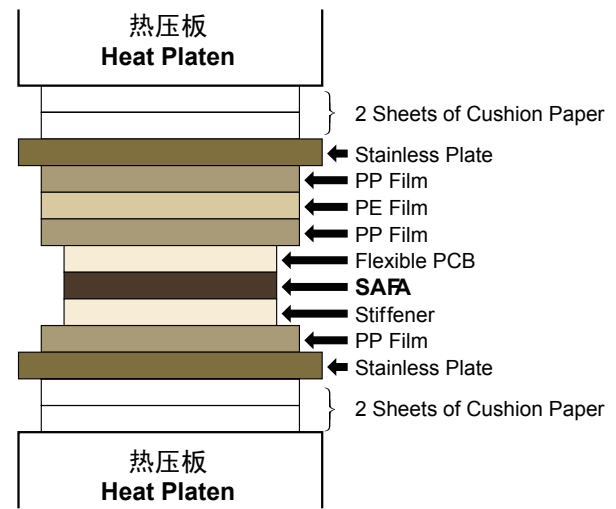
- 1** 粘合剂呈半固化状态、如果放置于常温下、则会发生快速硬化、因此请在低温（5℃以下）且湿度低于80%的条件下进行保管。  
 Time and temperature rapidly promote a change from the semicured to the fully cured adhesive state, so keep SAFA at 5°C or below and at 80%RH or below.
- 2** 在未开封的状态下、产品的质量保证期限为制造后4个月。  
 Guaranteed period for SAFA before unpacked is 4 months after manufacture.
- 3** 用纸作为崖壑垫材时、纸中的水分会使粘合剂质量劣化、有时会导致粘合剂与薄膜剥离、因此、使用前请仔细确认。  
 Moisture in press pads made of paper might make adhesiveness weaker and cause delamination of adhesive and polyimide film. If paper is used as press pads, be sure to check condition of press pads paper before using that.

## 加工方法示例（压合方式） An Example of Processing Method

### （压合步骤）Procedures (Press-Bonding)

- 1** 常温下设置  
Setting at room temp.
- 2** 5次左右的抽空处理  
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℃时再次抽空处理  
Removing Air again at 100℃
- 6** 加压 (2~4MPa)  
Apply pressure (2 to 4 MPa)
- 7** 升温至140~160℃时再次抽空处理  
Removing Air again at 140 to 160℃
- 8** 在160℃、2~4MPa的状态下保持40~60分钟  
Press-bonding at 160℃ under pressure of 2~4MPa for 40 to 60 min.
- 9** 冷却 Cooling
- 10** 取出 Taking out

### <压合设置示例> Materials assembly for Press-bonding



## SAFA 性能表 Properties of SAFA

试验项目 Test item	单位 Unit	处理条件 Treatment conditions	标准值（平均） Our Standard Value (Average)	保证值（平均） Guaranteed Value (Average)	试验方法 Test Method
粘合剂流动性 Resin Flow	mm	A	0.9 (生产时) (at the point of manufacturing)	0.2 以下 (Min.)	本公司方式 Our Standard
剥离强度 Peel Strength	N/mm	A	1.8	1.0 以上 (Max.)	本公司方式 Our Standard
		药品浸渍处理后 After immersion in chemical	1.4	0.6 以上 (Max.)	
焊锡耐热性 Solder Heat Resistance	—	260℃/20sec.	合格 Pass	合格 Pass	IPC-FC-232
耐水剥离强度 Water Resistance Peel Strength	kgf/cm	A	0.9	0.5	本公司方式 Our Standard

- 注 (1) 粘合剂流动性、剥离强度、焊锡耐热性是将35 μm电解铜箔的光泽面和FR-4(无铜板)用SAFA-40粘合后获得的值。  
Value of Resin Flow, Peel Strength, solder resistance are those of laminate using SAFA 40 as adhesive in press-bonding the shiny side of electrolytic copper foil (35μm, 1 once) with unclad FR-4.
- (2) 耐水剥离强度是用3%NaOH溶液在40℃的条件下对FPC基板进行150秒处理后、将该基板的KAPTON薄膜表面和75 μm聚酰亚胺薄膜用SAFA40粘合后获得的值。  
Values of water resistance peel strength is that of laminate using SAFA 40 as adhesive in press-bonding polyimide film (75μm) with polyimide surface of FPC treated in solution of 3% NaOH at 40℃ for 150sec.
- (3) 压合条件/ 温度: 160℃、时间: 60分钟、成型压力: 4MPa  
Press conditions: 160℃/60min./molding pressure 4MPa