

## FY08/FY10---Anti-PID and Snail Trails EVA 抗PID、抗蜗牛纹型EVA封装胶膜

### 产品介绍

飞宇EVA封装胶膜FY08，FY10属于快速固化型EVA，适于多种太阳能光伏组件封装使用。

### 产品特点

1. 优异的抗PID性能，以及抗蜗牛纹能力。
2. 优异的耐候性，抗湿热老化及紫外老化能力强。
3. 良好的透光性能及长期保持率，FY08，FY10分别是高透型及紫外截止的型号。
4. 优异的材料兼容性，与玻璃、焊带及汇流带、电池片、背板等材料有良好的粘结性。
5. 胶膜表面粗糙度大，有特殊的压花结构，层压排气性好，易叠放，层压时间短，效率高。

### Introduction

FeiYu FY08, FY10 EVA films are fast cure types, and widely used for encapsulating PV modules

### Characteristics

1. Excellent anti-PID and anti-snail trails ability.
2. Excellent durability, with good performance in DH & UV aging.
3. Good light transmittance and long-term retention, FY08 has higher light transmission in the UV wavelength region to allow greater power, FY10 is UV cut-off type model.
4. Outstanding material compatibility. Strong adhesive ability with glass, welding belt, cell, back sheet.
5. Film appearance thicker with special surface embossing, and easy to be operated and can shorten lamination time.

### 产品系列 Product series

型号类别 Item	抗PID性能 Anti PID ability	高透光率型 High transmittance type	紫外截止型 UV-cutoff type
FY08	Super-PID	✓	
FY10	Super-PID		✓



### 抗蜗牛纹能力Anti- snail trails abilities

FeiYu excellent EVA formula bring super anti-snail track abilities. No snail trails happening.  
飞宇优异的EVA配方提升了组件的抗蜗牛纹能力，从未出现客户蜗牛纹投诉情况。

Brand A



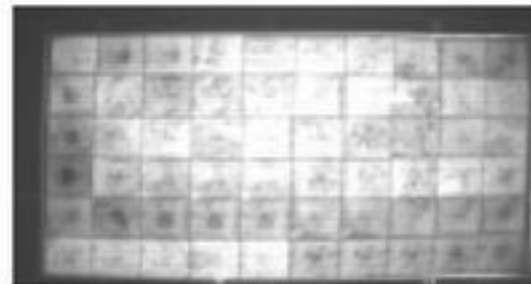
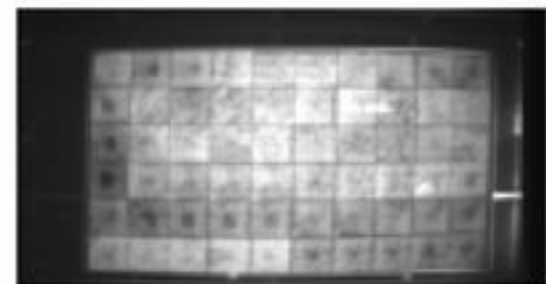
FEIYU




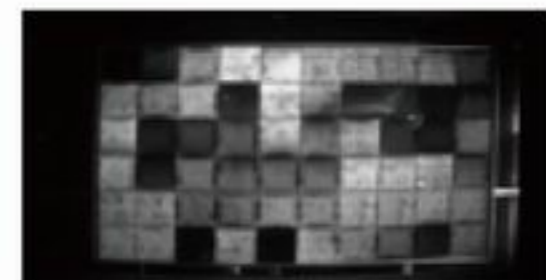
Customer on site comparison test : 1 year  
(PV modules with crack cells)

### 抗PID性能Anti- PID ability (TEST:85°C,RH85%,-1000V,96h,EL)

**FY08/FY10: Anti-PID ability**

Before test	96hrs
	

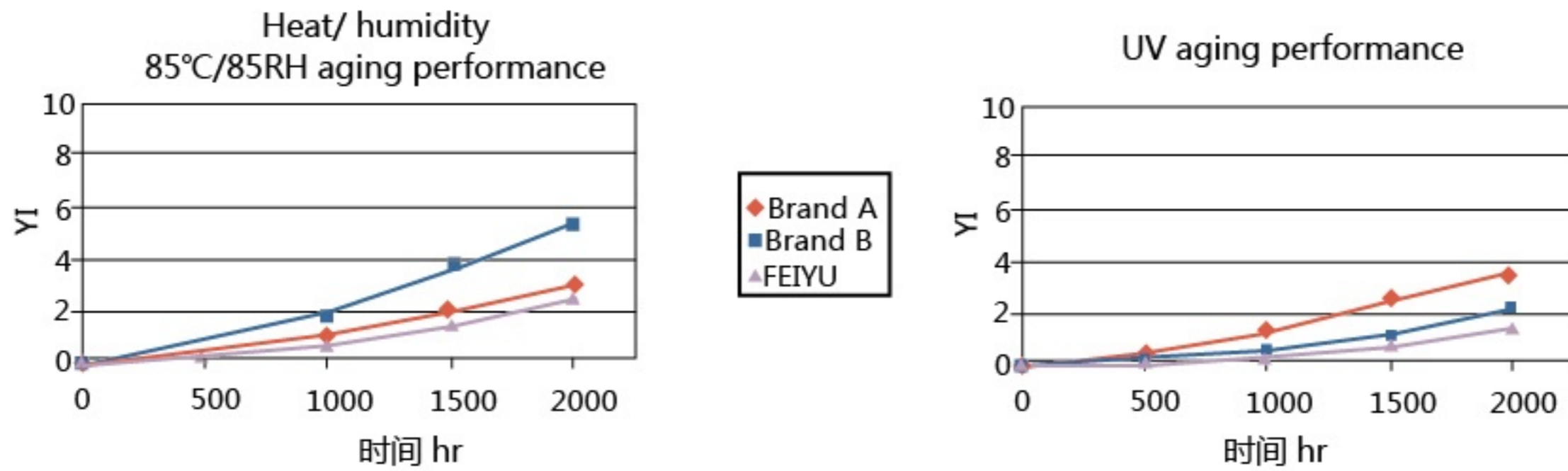
**Other brand A : Anti-PID ability**

Before test	96hrs
	



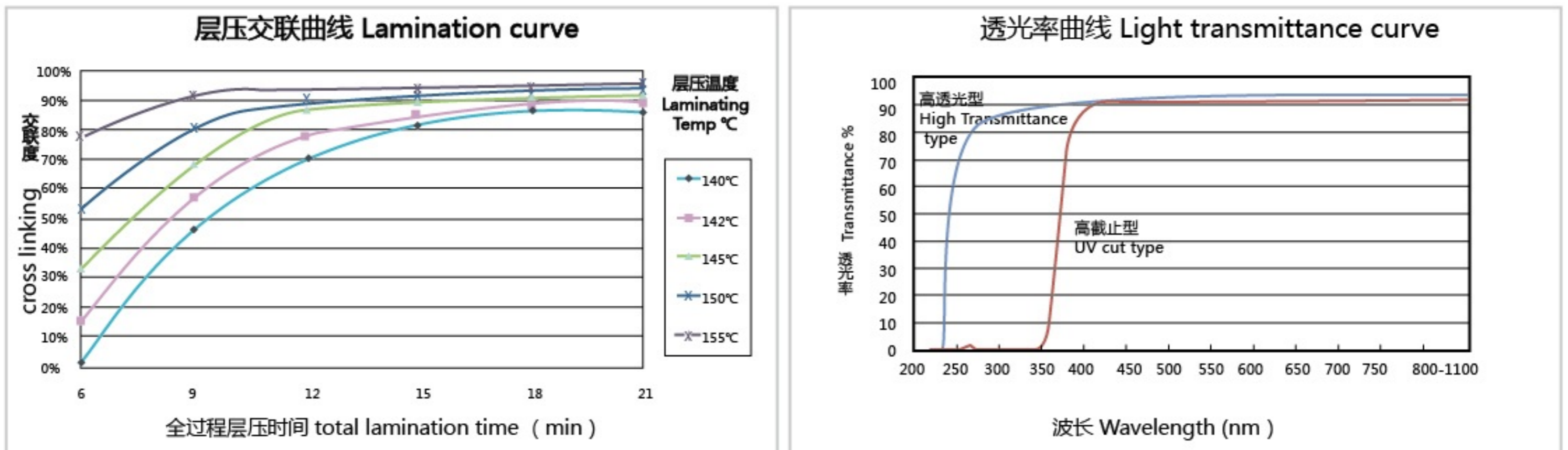
FY08/FY10---Anti-PID and Snail Trails EVA 抗PID、抗蜗牛纹型EVA封装胶膜

抗湿热/抗紫外老化性能 Heat/Humidity and UV Resistance



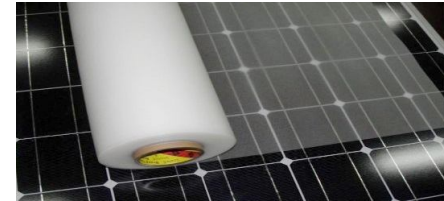
层压参数 Recommend lamination parameters:  
(Temp 140-155°C, vacuum 4-6 min, keeping 10-14 min)

产品透光率 Light Transmittance



性能参数 Property

性能 Property	单位 Unit	测试方法 Test Method	FY08	FY10
宽度Width	mm	FeiYu method	970-1000	970-1000
厚度Thickness	mm		0.60±0.10	0.60±0.10
紫外截止 UV cutoff wavelength ( nm )	%		>91	>90
VA含量VA content	%	TGA	28.5±2	28.5±2
交联度Gel content (142°C,18min)	Gel%	FeiYu method	>75	>75
收缩率Shrinkage Rate (120°C,3min)	%		MD≤4.0	MD≤4.0
			TD≤1.5	TD≤1.5
与玻璃剥离强度Peeling Strength With Glass	N/cm	ASTM D903	>130	>130
体积电阻率Volume Insulating Resistance	Ωcm	GB/T1410-2006	>1*10 <sup>15</sup>	>1*10 <sup>15</sup>
耐紫外黄变 UV Light Resistance ( 120kWh/m2 )	△YI	ASTM G154	<5.0	<5.0
耐湿热黄变Damp-Heat Resistance ( 85°C,85%RH,1000hr )	△YI	ASTM E313	<5.0	<5.0



## Feiyu solar eva film

### Cross-linking rate and peeling strength test under different parameters

#### 1. Lamination Process Parameters (Standard)

Parameters		Temperature Setting °C	Pump Down second	Pressure-1 kpa/second	Pressure-2 kpa/second	Pressure-3 kpa/second	Roots Pump kpa	Total Time Second
Single Chamber		142-148	300-360	-60 / 15	-30 / 15	-15 / 480~600	~~	850-930
Double Chamber	Chamber 1	142	310	-0 / 15	-0 / 15	-0 / 50	50-260	780-850
	Chamber 2	145	10	-0 / 15	-0 / 15	-0 / 350		

#### 2. Cross-linking rate & Peeling strength

ITEM eva : FY08,0.40mm with glass / FY10, 0.45mm with back sheet

TEMPERATURE	TIME (minute)	GEL CONTENT/CROSS LINKING RATE	Peeling strength with glass	Peeling strength with JINGMAO backsheet
142°C-143°C	(5+10)	87.33	136	120
144°C-145°C	(5+10)	89.96	128	110
145°C-146°C	(5+7)	82.25	157	143
148°C-150°C	(5+5 )	88.26	134	118