

FY101--Solution of increasing standard PV modules power efficiency.  
白色EVA-FY101 单玻组件提升功率封装解决方案

**FY101 产品系列**

FY101 是专门为单玻组件提升功率而设计开发的,做为组件层压时下层(电池背面)胶膜使用,可提升通60片电池组件功率1.5--4瓦。

**FY101 产品特点**

- 1.白色胶膜反射率高,明显提升组件效率。
- 2.胶膜粗糙表面增加漫发射,提升组件效率。
- 3.采用预交联工艺,自色EVA层压无翻层、无溢白、无气泡、无并片及串间距变化。
- 4.抗湿热老化及紫外老化能力强。
- 5.优异的材料兼容性,与焊带及汇流带、电池片、背板等材料有良好的粘结性。
- 6.层压简便,层压时间短,可使用单腔层压机层压。

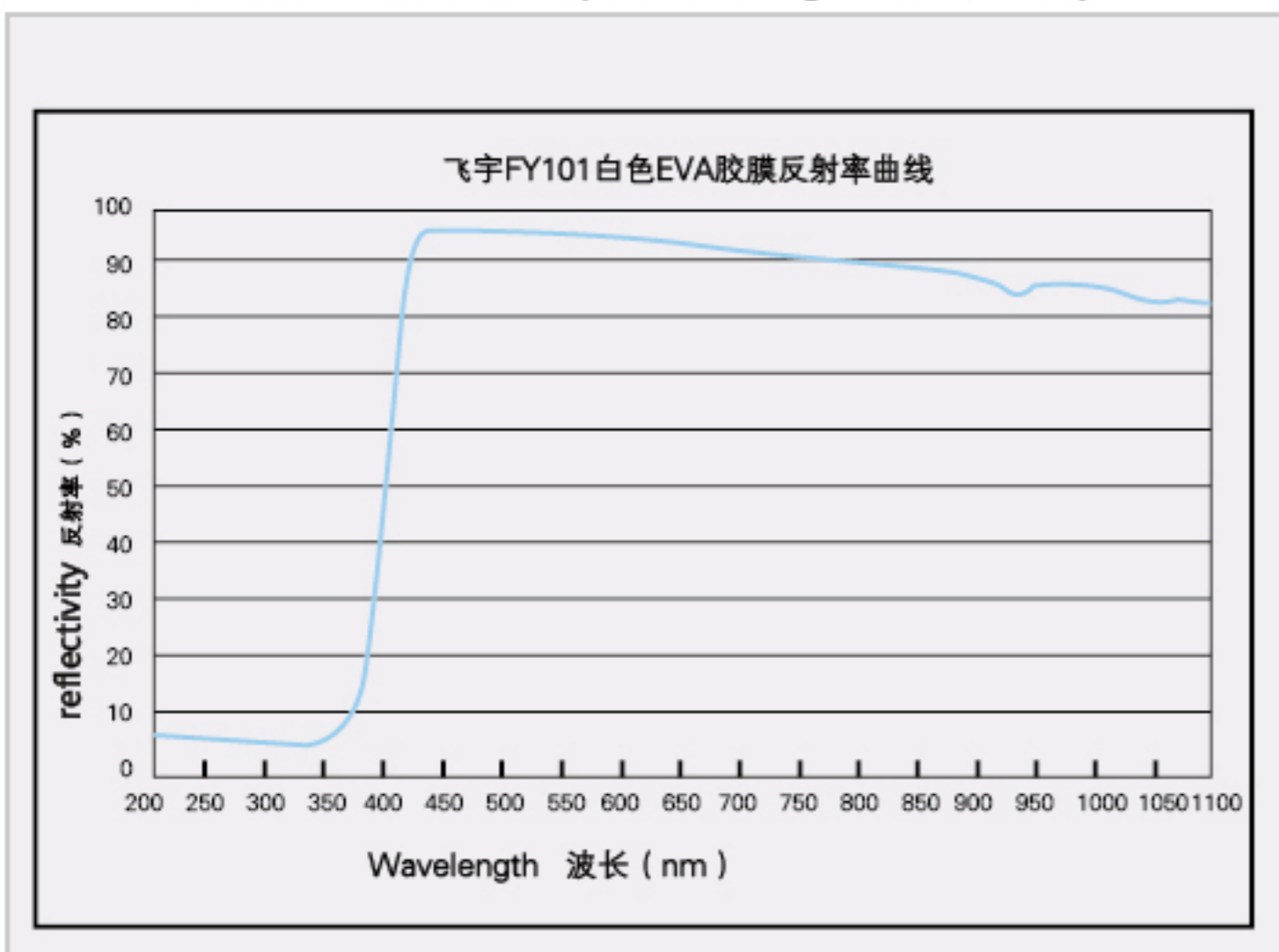
**FY101 Introduction**

FeiYu white EVA-FY101, designing for increasing standard PV module power efficiency as bottom layer EVA.  
Can increase 1.5w-4w per standard PV module(60cells).

**FY101 Characteristics**

- 1.White EVA increase PV module power efficiency markedly.
- 2.FY101s' rough surface increase light diffuse reflection and PV module power efficiency
- 3.Pre-cross linking white EVA: No white color overflow, no bubble, no cell string moving
- 4.Excellent durability, with good performance in DH&UV aging.
- 5.Outstanding material compatibility. Strong adhesive ability with weiding belt, cell, back sheets.
- 6.Shorten laminating time, can be used in single chamber laminator.

FY101 产品反射率 products light reflectivity



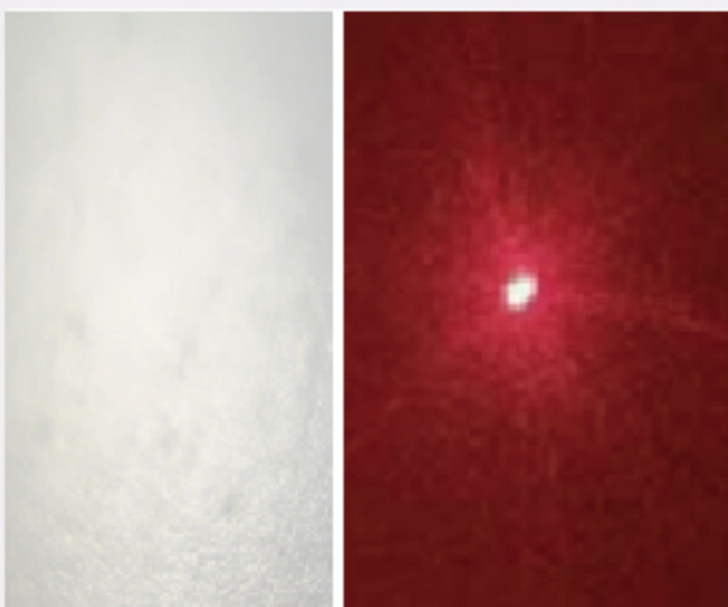
提升组件电池下表面材质反射率,可增加组件功率

Wavelength (400--700nm)	平均反射率 Light reflectivity
常规背板 Back sheet	70-85%
白色EVA-FY101 White EVA-FY101	>90%

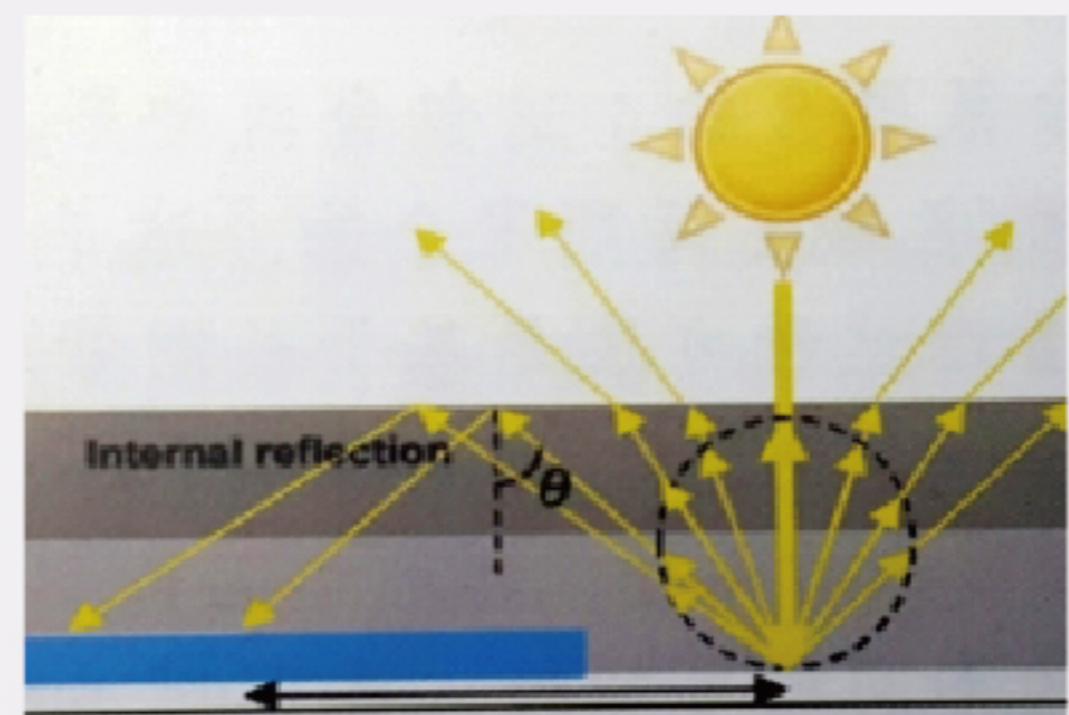
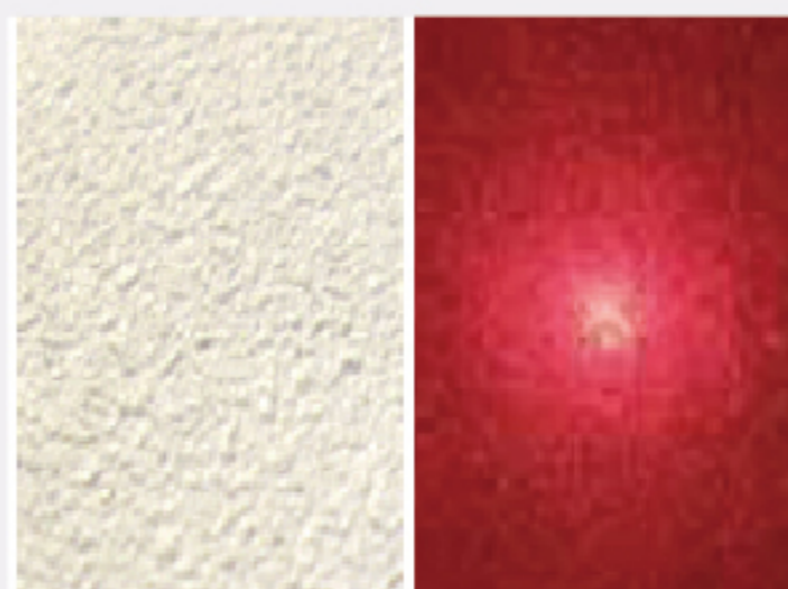
光伏组件光损失示意图: Light loss in PV modules

FY101 拥有粗糙表面,漫反射强度高,有利于组件功率提高  
FY101 light diffuse reflection ability increase PV module power efficiency

背板表面  
Back sheet surface

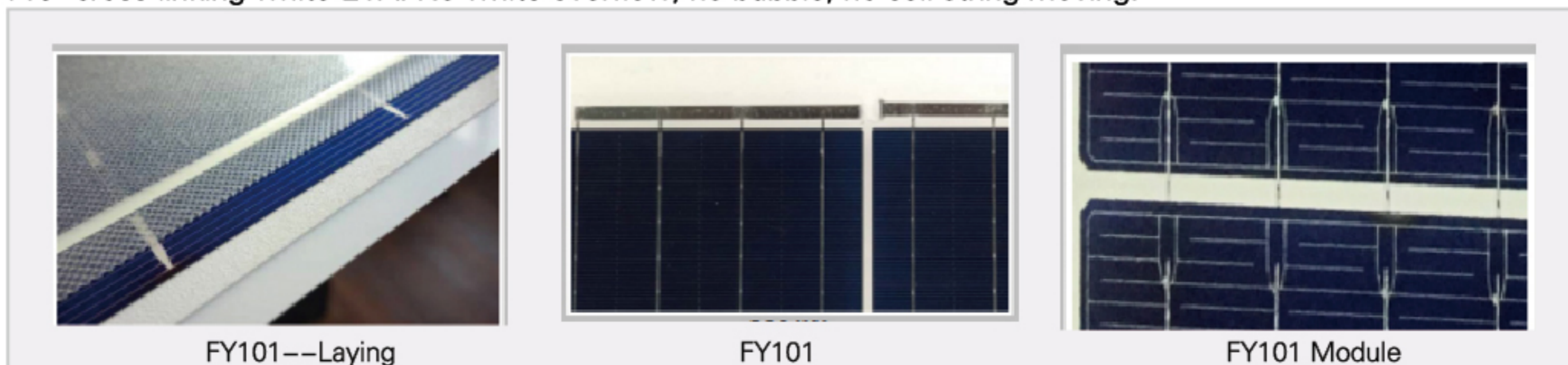


FY101表面  
FY101 surface

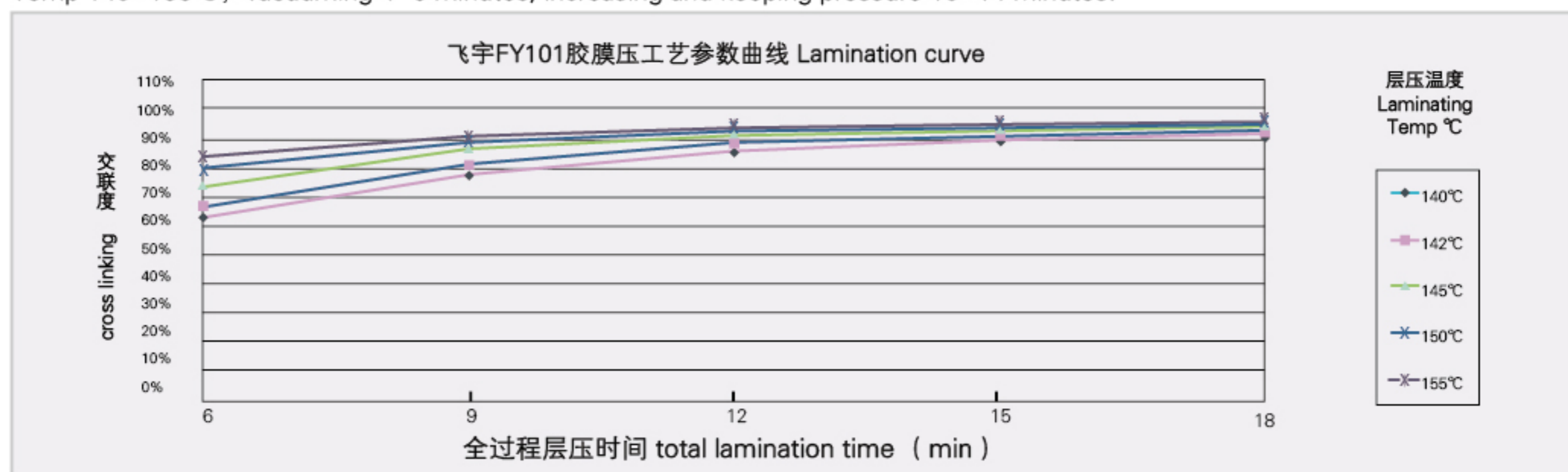


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FY101 采用预交联工艺，层压成品率高，无白色翻层，无气泡，无并片  
Pre-cross linking white EVA: No white overflow, no bubble, no cell string moving.



FY101 建议层压工艺参数(无需延长层压时间) Recommend lamination parameters.  
Temp 140-155°C, vacuuming 4-6 minutes, increasing and keeping pressure 10-14 minutes.



FY101 性能参数 Property

性能 Property	单位 Unit	测试方法 Test Method	FY101
宽度 Width	mm	FeiYu method	970-1000
厚度 Thickness	mm	FeiYu method	0.50 ± 0.10
反光率 Light reflectivity (400-700nm)	%	FeiYu method	>90
VA含量 VA content	%	TGA	28.5 ± 2
交联度 Gel content (142°C, 18min)	Gel%	二甲苯法 Xylen method	>75
收缩率 Shrinkage Rate (120°C, 3min)	%	FeiYu method	MD ≤ 4.0 TD ≤ 1.5
与TPE背板剥离强度 Peeling Strength With TPE	N/cm	FeiYu method	>50
体积电阻率 Volume Insulating Resistance	Ω cm	GB/T1410-2006	>1 * 10 <sup>14</sup>
耐紫外黄变 UV Light Resistance (120kWh/m <sup>2</sup> )	ΔYI	ASTM G154	<5.0
耐湿热黄变 Damp-Heat Resistance (85°C, 85%RH, 1000hr)	ΔYI	ASTM E313	<5.0