



# 黑色红外高反射太阳电池背膜

## BLACK SOLAR MODULE BACKSHEET OF INFRAED HIGH REFLECTION

**型号: FFC-JW30**

**全面满足 UL Type1、IEC、Class A 防火等级要求**

Fully meet fire resistance rating requirements of UL Type 1 and IEC Class A

**特点: Rf>30%**

**1. 黑色红外高反射背板在红外光区的反射率较同类产品高出 30% 以上，可以降低组件 NOCT。**

IR reflectivity of black backsheet is 30% higher than similar products, decreased module NOCT.

**2. 黑色红外高反射背板组件比常规黑色背板组件功率高出 1.5-2.0W。**

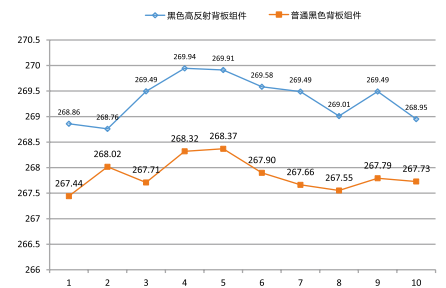
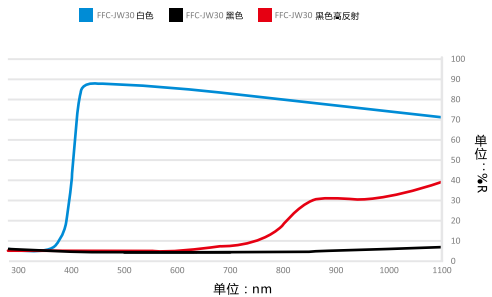
The output power of solar module with this type of backsheet is 1.5-2.0W more than those with regular black backsheet.

### 产品特点 ( FFC-JW30 )

1. 双面氟、膜胶一体化结构: FFC//PET//FFC;
2. 采用等离子体化学改性技术和氟硅烷化表面接枝技术;
3. 黑色背板散热性能优越;
4. 规格可按客户要求定制, 最大宽度 1300mm。

### FEATURES OF PRODUCTS ( FFC-JW30 )

1. Membrane - adhesive integrated structure (FFC//PET//FFC) with double-side fluorine coated.
2. Applying plasma chemical modification and fluoro-Silanization surface grafting techniques.
3. Black backsheet with high heat dissipation.
4. Made-to-order backsheet with width up to 1300mm.



注: FFC 为中来公司特种四氟型聚合物。专利产品, 仿冒必究!

Remarks: FFC is a special tetra-fluoro polymer owned by Jolywood. Patented Products, Counterfeiting Not Allowed.

## FFC-JW30(黑色)性能指标(FFC//PET//FFC) TECHNICAL DATA OF FFC-JW30(BLACK)

项目 Item		数值 Value	单位 Unit	引用标准 Quoted Standard
背膜厚度 Film Thickness	标称厚度 Nominal thickness	300	μm	GB/T13542.2-2009
	标称公差 Nominal tolerance	± 5%	-	-
抗张强度 Tensile strength (MD)		157	N/m m <sup>2</sup>	GB/T13542.2-2009
抗张强度 Tensile strength(TD)		168	N/m m <sup>2</sup>	GB/T13542.2-2009
断裂伸长率 Elongation at break (MD)		145	%	GB/T13542.2-2009
断裂伸长率 Elongation at break (TD)		135	%	GB/T13542.2-2009
收缩率 Shrinkage 150° C30min(MD)		0.45	%	GB/T13542.2-2009
收缩率 Shrinkage 150° C30min(TD)		0	%	GB/T13542.2-2009
涂层附着力 (FFC//PET)Coating adhesion		0	等级 grade	GB/T9286-1998
与 EVA 粘接强度 (初始) Peeling strength with EVA(initial)		70	N/10mm	GB/T2790-1995
击穿电压 Breakdown voltage		21.3	KV	GB/T13542.2-2009
局部放电电压 Partial Discharge		>1000	VDC	GB/T60664-1-2007
水蒸汽透过率 Moisture Vapor Transmission Rates		1.88	g/ m <sup>2</sup> ·d	GB/T26253-2010
耐湿热老化试验 Damp-heat testing (85°C85%RH,2000h)(85°C85%RH,2000h)		不分层、不起泡 Δ≤ b2 No delamination , no bubble	-	IEC 61215-2005
人工辐射暴露 Radiation exposure(QUVB,4000h)		4 级 Grade4	-	GB/T16422.3-1997
紫外预处理 UV pretreatment(15kwh)		不分层、不起泡、不褶皱 Δ≤ b2 No delamination, bubble or fold	-	IEC 61215-2005
Super UV(65° C65%RH,60kwh)		不分层、不起泡 Δ≤ b2 No delamination, no bubble	-	GB/T16422.2-2014
沸水处理 (沸水煮 24h) Boiling water treatment (boiled for 24h)	外观检查 Visually inspect	不分层、不起泡、不褶皱、无脱落、无粉化 No delamination, bubble or fold. No peeling or no powdering	-	GB/T17748-2008
	涂层附着力 Coating adhesion	0	等级 grade	GB/T9286-1998
冷热循环处理 (-40° C-85° C,6h/ 周期, 200 周期) TC200	外观检查 Visually inspect	不分层、不起泡、不褶皱 No delamination, bubble or fold	-	IEC 61215-2005
	击穿电压 Breakdown voltage	≥ 16	KV	GB/T13542.2-2009
冷热循环 50 后湿冻处理 (40° C-85° C,85% 24h/ 周期, 10 周期) HF10after TC50	外观检查 Visually inspect	不分层、不起泡、不褶皱 No delamination, bubble or fold	-	IEC 61215-2005
	击穿电压 Breakdown voltage	≥ 16	KV	GB/T13542.2-2009
耐酸 / 碱性 Acid/Alkali resistance		不分层、不起泡 No delamination, No bubble	-	GB/T17748-2008
耐盐雾性 Salt spray resistance		不分层、不起泡 No delamination, No bubble	-	GB/T2423.17-2009

注: 以上数值为典型值 Remark: The above data are typical values.