



# 太阳能电池背膜

## SOLAR MODULE BACKSHEET

型号: T-3502

DuPont™ Tedlar® PVF Films



### 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

#### 产品特点 (T-3502)

1. 双面氟碳结构, 集成杜邦 Tedlar, 品牌驰名、性能可靠;
2. 优异的耐 UV 与抗老化特性;
3. 良好的电气绝缘与耐电压特性;
4. 背部局部放电电压大于 1500V;
5. 规格可按客户要求定制, 最大宽幅 1300mm。

#### FEATURES OF PRODUCTS (T-3502)

1. Double-side fluorocarbon structure (PVF/PET/PVF) with the integration OF Tedlar (DuPont).
2. Excellent UV resistance and aging resistance.
3. Good electrical insulation and breakdown.
4. Partial discharger voltage of the backsheet is higher than 1500V.
5. Made-to-order backsheet with width under 1300mm is available.



- PVF
- Adhesive
- PET
- Adhesive
- PVF



## T-3502 性能指标 (PVF//PET//PVF) TECHNICAL DATA OF T-3502

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	316	μm	GB/T13542.2-2009
	标称公差 Nominal tolerance	± 5%	-	-
抗张强度 Tensile strength(TD)		154	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)		165	%	GB/T13542.2-2009
断裂伸长率 Elongation at break (TD)		141	%	GB/T13542.2-2009
收缩率 Shrinkage 150°C30min(MD)		0.49	%	GB/T13542.2-2009
收缩率 Shrinkage 150°C30min(TD)		0	%	GB/T13542.2-2009
层间剥离强度 (PVF//PET) inner-layer adhesion		4.8	N/10mm	GB/T2790-1995
与 EVA 粘接强度 (初始) Peeling strength with EVA(initial)		87	等级 grade	GB/T2790-1995
与 EVA 粘接强度 Peeling strength with EVA(85° C85%RH,1000h)		76	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		≥ 1500	VDC	GB/T60664-1-2007
水蒸汽透过率 Moisture Vapor Transmission Rates		1.82	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
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
	层间剥离强度 Inner-layer adhesion	>4	N/10mm	GB/T2790-1995
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) HF10(after 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
落砂耐磨性 Falling abrasive resistance		155.3 (标准砂粒径 Standard sand diameter:0.25-0.65mm)	L	GB/T23988-2009

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