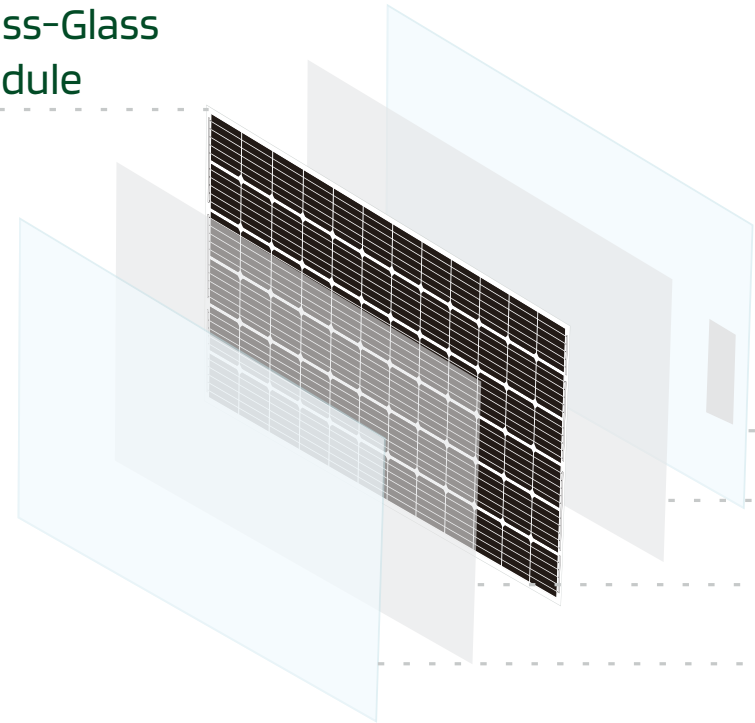
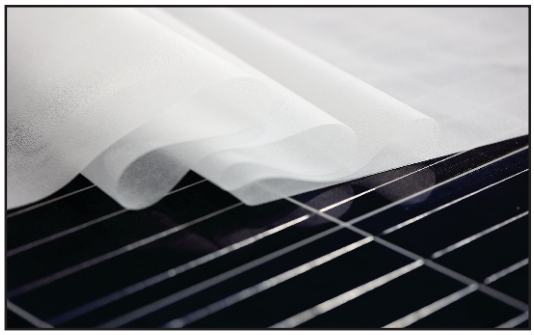
PIX EPE (G2G- G2TBS)- E02

PIXON
Redefining Solar

Pixon EPE Film
For Encapsulant Solar Module

Glass-Glass Module





- Glass
- PIX-EPE-E02
- PIX-EPE-E02
- Glass

ABOUT US

PIXON G2G - G2TBS products are a type of EVA and POE co-extruded encapsulant film. EP-series product provides ahigh cost-effective encapsulant solution for the PID-free requirement of P type or N type bifacial PV modules, which could withstand 192h PID test at the test condition of 85 , RH 85%, -1500Vdc. Besides, EP-series film also exhibits excellent durability.

The material and structure of EP-series product is as below

EVA | POE | EVA

The main characteristics of PIXON G2G - G2TBS film are as follows:

1) Excellent long-term PID resistance;
2) Excellent durability,such as weather resistance,high-temperature and high-humidity resistance, UV light resistance;
3) Excellent adhesion to glass,metal and polymer backsheet,maintaining long term adhesion.
4) Good light transmittance and transparency;
5) Good manoeuvrability during lamination process,no slipping issue

CATEGORY

PIXON G2G & G2TBS products have below popular category:

Type	G2G		G2TBS	
Gramweight & Tolerance	(430±20)g/m²	(560±20)g/m²	(390±20)g/m²	(560±20)g/m²
Thickness & Tolerance	0.50±0.10mma	0.65±0.10mma	0.50±0.10mma	0.65±0.10mma
Length per roll	130m/350m	110m/290m	150m/390m	110m/290m
Width tolerance	(0/+5)mm	(0/+5)mm	(0/+5)mm	(0/+5)mm

CERTIFICATIONS

CERTIFIED ISO 9001:2015 COMPANY

PIXON GREEN ENERGY PRIVATE LIMITED

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Solar is the new Green!

*Due to continuous product updation, specifications may change without notice.

D/EPE_E02/240725/E-01-01

TECHNICAL DATASHEET
PIX EPE - E02

Technical Parameters For PIX EPE - 02

Properties	TestMethod	Units	Technical Index	
			G2G	G2TBS
Physical				
Thickness	ASTM D 6988	μm	≥450 (±5%)	≥450 (±5%)
Width	Scale	mm	Up to1335	Up to1335
Melting Point	ISO 11357	°C	70 (±3)	70 (±3)
Surface Type	Visual	-	Double Side Orange Peel Embossed	
Thermal				
Thermal Shrinkage	120°C,3 Minutes	%	MD ≤2.5%	MD ≤2.5%
			TD ≤1.5%	TD ≤1.5%
Electrical				
Volume Resistivity	ASTM D 257	Ω·cm	≥1.0×10¹5	≥1.0×10¹5
Dielectric Strength	ASTM D 149-20	kV/mm	≥25	≥25
Optical				
Transmittance	ASTM E 424	%	≥90	≥90
UV Cut Off Wavelength	ASTM E 424	-	UV-Transparent	UV-Transparent
Refractive Index	ISO 489	-	1.48	1.48
Mechanical				
Strength of Peeling from Glass	ASTM D 903	N/cm	≥75	≥75
Strength of Peeling from Backsheet	ASTM D 903	N/cm	≥75	≥75
Tensile Strength(Cured)	ASTM D 638	Mpa	≥5	≥5
Elongation at Break(Cured)	ASTM D 638	%	≥500	≥500
Chemical				
Gel Content	ASTM D 2765-Soxhlet Method	%	>75	>75

Notes:

- The P type or N type PV modules are encapsulated by G2G/G2TBS film.
- Test condition:85o C, 85%RH, -1500Vdc, 192h.
- When preparing gel content samples,the sample preparation structure should be stacked according to the BOM of the actual PV modules.
- For example: when G2G film is used in a glass - glass module, if the front layer film is EPE, and the rear layer film is EPE, the sample preparation structure shall be Glass / release film / EPE/ release film /G2G / release film/ glass. After lamination, the gel content of the rear layer EPE film shall be tested.

STORAGE

1. The product shall be stored indoors at temperature between 0° C and 30° C, and humidity below 60% RH. Avoiding direct sunshine, and keeping away from heat and dust.
2. Shelf life of G2G&G2TBS products is 6 months from the production date.

APPLICATION

LaminationParameter	Single chamber	Double chambers laminato	
		First step	Second step
Hot plate actual	143-155	120-135	145-155
Vacuum time	6 min ~ 6.5min	6 min ~ 6.5min	0.5min
Press Time	9min~15min	1min~6min	8min~14min

Once the original package is opened, using up the product within 8hrs is recommended.Recommended lamination condition for Glass -Glass PV modules:

PACKAGING INFORMATION

Unless specified, below is the standard packing data (for 500 micron thickness, 1123 mm width)		
Length/Roll	150 Meters	300 meters
Nos of Rolls/Pallet	9	4
Total Linear Meters / Pallet	1350	1200
Total SQM / Pallet	1516.08	1347.6

Each Roll is sealed in a protective bag in corrugated box | Boxes are strapped on suitable pallets with Protection Angle Board.

The above process conditions are examples of the representative,and it is necessary to adjust it according to the performance of laminators, components of PV modules,etc.The optimized process condition could be chosen by measuring gel content (>75%) of the EP film in the PV modules.