Technical Data Sheet

Nabil-940

Flexible Transparent conductive electrodes for PSCs

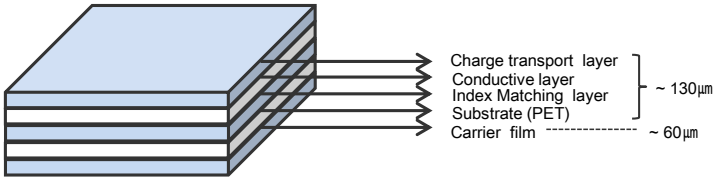
1. Key Feature

- Transparent electrode for PSCs
- Low sheet resistance
- High Visble Light Transmission (380~780 nm)
- Good Wettability

2. Application

- BIPV: Building Integrated Photovoltaic System
- VIPV: Vehicle Integrated Photovoltaic System
- RIPV: Road Integrated Photovoltaic System
- Wireless IoT Products for medical, sports devices, security sensors, cameras etc.

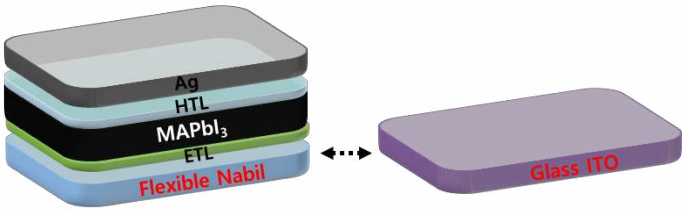
3. Product Structure

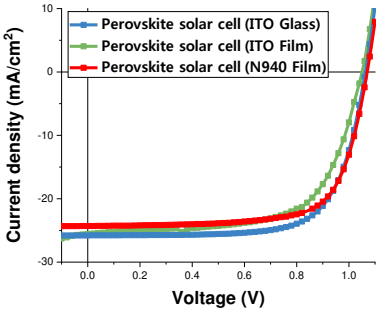


4. Specification

Properties	Result
Sheet Resistance (Ω/□)	≤ 20
Visible Light Transmission (%, Avg)	≥ 84
WF (eV)	-4.1~-4.2
Surface Roughness (nm)	≤ 1
Surface Energy (mN/m)	≥ 40
Adhesion	≥ 4B
Flexibility (R/R_0)	≤ 15 % (R=7 mm, 1,000 cycles)

5. PSC Cell Efficiency(Nabil940 VS. ITO Glass, ITO film)





Parameter	N940	ITO Film (E社/USA)	ITO Glass
Visible Light Transmission (%, Avg)	84.2	81.6	84.6
Sheet resistance (Ω/sq)	20	47	10
Voc(V)	1.07	1.05	1.06
Jsc(mA/cm^2)	24.3	25.6	25.8
FF(%)	71.3	65.1	71.0
PCE(%)	18.6	17.5	19.5

* MSWAY production PSC 4.64 ㎟ cell actual measurement data

* All measurement values are subject to change without prior notice.

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