

Graphene on PET

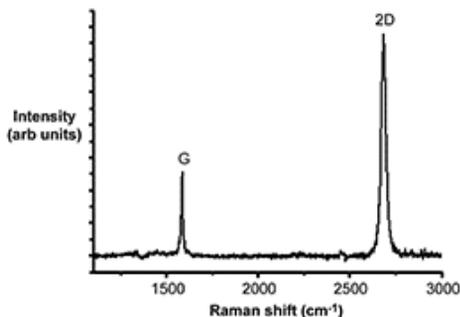


Product Size	Up to 500x600mm ²
Film morphology	Continuous Monolayer (>95%)
Sheet Resistance	Av. < 250~400Ω/sq
Mobility	>3500cm ² /Vs
Transmittance	>97%
Substrate	PET(188μm)
Domain Size	3-12μm

Properties of Graphene Film on PET

1. Thickness and quality of graphene films is controlled by Raman Spectroscopy Graphene coverage is about 80%
2. The graphene film is continuous, with occasional holes and cracks.
3. The graphene film is polycrystalline, i.e. it consists of grains with different crystallographic orientation.
4. Sheet resistance: < 500 Ω/□

Raman Spectrum



Raman Spectrum (after transfer)

Applications

- Flexible / Stretchable / Electronics
- Transparent electrode
- Support for metallic catalysis
- MEMS or NEMS
- Conductive coating
- Multi-functional Nanocomposite
- Graphene Research
- ETC

Reference

- (1) S. Bae*, H. Kim*et al. "Roll-to-roll production of 30 inch graphene films for transparent electrodes" *Nature Nanotech.* 5, 574 (2010) [pdf] (Cover Article).
- (2) K S. Kim *et al.* "Large-Scale Pattern Growth of Graphene Films for Stretchable Transparent Electrodes." *Nature*457, 706 (2009) [pdf].