

Catalog # 06-2534 Monolayer Graphene on SiO<sub>2</sub>/Si (10 mm x 10 mm)**Physical Properties of Graphene film:**

Growth Method: Chemical Vapor Deposition (CVD synthesis)

Appearance: Transparent

Transparency: &gt;97%

Coverage: 95%

Layers: 1

Thickness (theoretical): 0.345 nm

FET Electron Mobility on Al<sub>2</sub>O<sub>3</sub>: 6900 cm<sup>2</sup>/VsFET Electron Mobility on SiO<sub>2</sub>: 3760 cm<sup>2</sup>/VsSheet Resistance on SiO<sub>2</sub>/Si: 410-490 Ω/sq (1 cm x 1 cm)

Grain size: Up to 20 μm

**Substrate SiO<sub>2</sub>/Si:**

Dry Oxide Thickness: 285-315 nm

Type/Dopant: P/Bor

Orientation: &lt;100&gt;

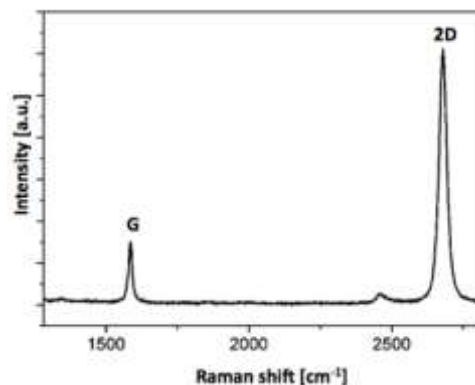
Resistivity: 1-10 Ohm-cm

Thickness: 505-545 μm

Front surface: single side polished

Back surface: etched

Particles: &lt;10@0.3 μm

**Applications:** Flexible batteries, electronics, aerospace, MEMS and NEMS, Microactuators, Conductive coatings**Quality control:** Raman Spectroscopy and Optical Microscopy

References:

1. *J. Electrochem. Soc.*, **2012**, *159*, A752.
2. *J. Mater. Chem. A.*, **2013**, *1*, 3177.