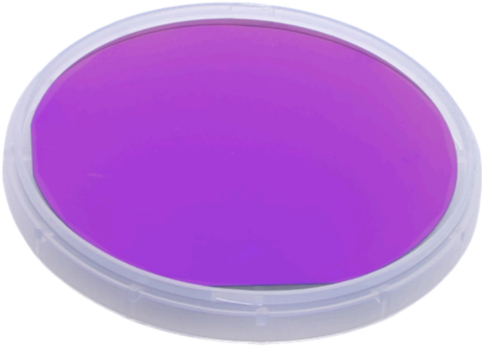
GENERAL GRAPHENE

Product Data Sheet

10239 COGDILL ROAD
KNOXVILLE, TN 37932
1-865-383-3787



Monolayer Graphene on 300 nm SiO_2/Si

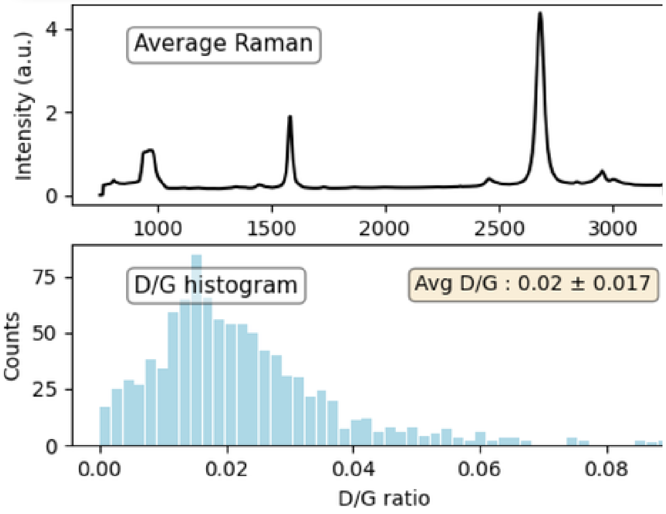
Growth Method	CVD Synthesis
Quality Control	Raman, SEM, and Optical
Transfer Method	Wet Transfer Method
Transparency	~97.7%
Graphene Thickness (Å)	3.45
Average Graphene Grain Size (μm)	~80
Multilayer Coverage (%)	< 5%
Graphene Coverage on Wafer	> 90%
I2D/IG Average - after transfer	> 1.6
ID/IG Average - after transfer	< 0.05
2D peak FWHM (cm-1) - after transfer	~ 35
Dirac Point (mV)	220 ± 40 mV
Sheet Resistance (Ω/sq) – on SiO2/Si wafer	600 ± 50 Ω/sq
Mobility (cm2/Vs)* (dep on transfer)	2400 ± 230 cm2/Vs
Appearance	Transparent film

[*] Graphene on SiO_2/Si wafer gated with 1X PBS solution

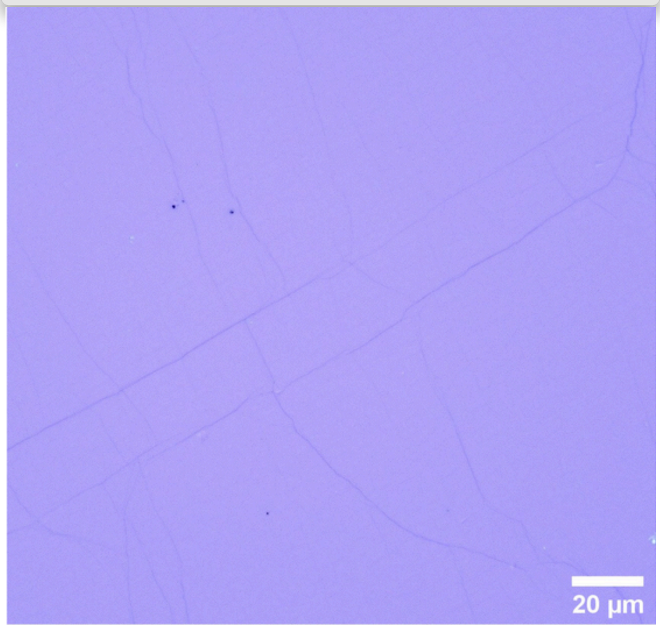
Specifications for SiO_2/Si Wafer

Diameter	*100 mm*
Type/Dopant	*P-type (Boron)*
Growth Method	CZ Prime
Orientation	*<1-0-0>*
Resistivity	<0.005 Ω-cm
Thickness	525 µm ± 25 µm
Film	Wet oxide on both sides, 3000 Å ± 5%
Finish	Single-side polished
Flats	2 SEMI

Single Sample Raman Analysis



Optical Image on Wafer



SEM Image