

Monocrystalline Silicon Wafers

N-type - YSG210 - Res0.4 - Grade A





Single-line Energy consumption roduction capacity and material greatly enhanced consumption greatly reduced



Industry-leading quality standards

Comprehensive Product and System Certification

- · ISO9001:2015 Quality Management System
- · ISO14001:2015 Environmental Management System
- · ISO45001:2018 Occupational Health and Safety Management System





Monocrystalline Silicon Wafer Specification

N-type - YSG210 - Res0.4 - Grade A

Key Parameters

Conductivity Type	N-type	P/N-type Tester (DLY-2P/N)	
Doped Elements	Ga. (Gallium)		
Resistivity / Ω·cm	0.4-1.1	Wafer Automatic Inspection Equipment	
Lifetime / μs	≥70	Quasi-steady-state photoconductivity decay method / Transient photoconductivity decay method Injection Level: 1E15cm (Sinton BCT-400)	
Interstitial Oxygen Content: at/cm³	≤8.0x10 ¹⁷	Fourier Transform Infrared Spectrometer (ASTMF121-83)	
Substitutional Carbon Content: at/cm³	≤5.0x10 ¹⁶	Fourier Transform Infrared Spectrometer (GB/T1588-2009)	

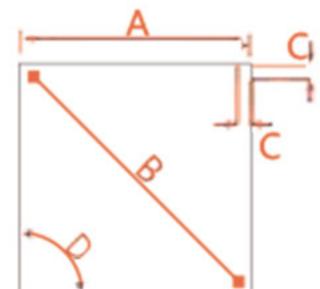
Material Properties

Growth Method	Czochralski Method	
Crystallinity	Monocrystalline	Selective Chemical Etching Method (ASTM F47-88)
Dislocation Density/PCS/cm ²	≤500	X-Ray Diffractometer (ASTMF26-1987)
Surface Crystal Orientation	<100>±3	X-Ray Diffractometer (ASTMF26-1987)
Lateral Crystal Orientation	<010>, <001>±3	X-Ray Diffractometer (ASTMF26-1987)

Geometric Dimensions and Surface Properties

Silicon Wafer Model	YSG210	
Geometric Shape	Fully Square	
Chamfer Edge Shape	Arc	
Silicon Wafer Margin / mr	n 210±0.25	Wafer Automatic Inspection Equipment
Wafer Diameter / mm	φ295±0.25	Wafer Automatic Inspection Equipment
Verticality	90±0.15	Wafer Automatic Inspection Equipment
Thickness / µm	135±10 150±10	Wafer Automatic Inspection Equipment
Batch Thickness / μm	≥155 ≥130	Wafer Automatic Inspection Equipment
TTV/μm	≤25	Wafer Automatic Inspection Equipment
Line mark / um	≤15	Wafer Automatic Inspection Equipment
Bending / µm	≪40	Wafer Automatic Inspection Equipment
Warpage / μm	≤40	Wafer Automatic Inspection Equipment
Cutting Method	Diamond Wire Cutting	
Surface Quality	The surface is clean and free from visible contamination (no oil stains, fingerprints, spots, mortar residue, glue residue)	Wafer Automatic Inspection Equipment
Chipping	Depth ≤ 0.33 mm & length ≤ 0.55 mm, no more than 1 per wafer, no V-shaped edge chipping	Inspected manually or by wafer automatic inspection equipment
Cracks and air holes	Not allowed	Wafer Automatic Inspection Equipment

Schematic Diagram of Silicon **Wafer Dimensions**



A: 210±0.25mm

B: φ295±0.25mm

C: 1.41±0.45mm

D: 90±0.15°

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