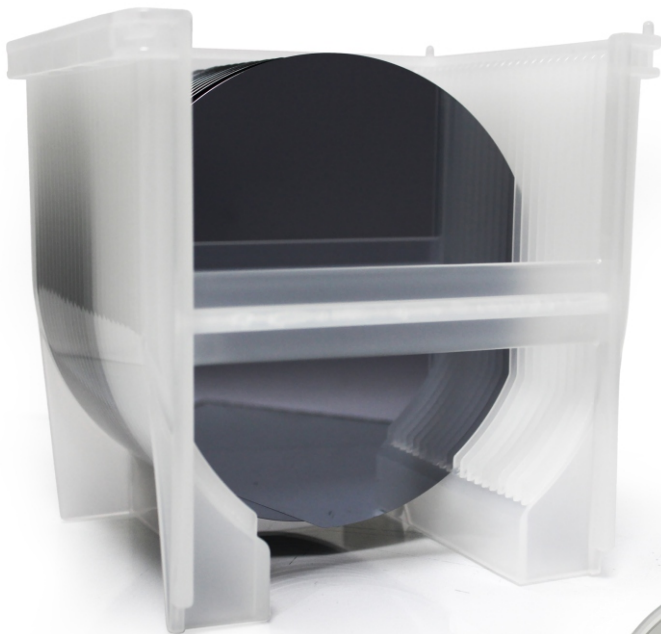


**P**Type  
**N**Type

# Silicon Wafer

## Product Description

Silicon wafer-Silicon substrate is a thin slice of semiconductor material. It is used in electronics for the fabrication of integrated circuits and in photovoltaics for conventional, wafer-based solar cells. It is used as a support for the manufacture of microstructures by techniques such as etching, doping, deposition of other materials (epitaxy, sputtering, chemical vapor deposition, etc.) and photolithography.



- Totally customized
- Low and medium volumes
- Any diameter
- Any orientations
- Any thickness



## Diameter

1 inch	2 inch	3 inch	4 inch
5 inch	6 inch	8 inch	12 inch

Further diameters on request

Follow us:



# Silicon Wafer

## Type & dopant

N - Type	P (Phosphorus), Sb (Antimony), As (Arsenic)
P-type	B (Boron)
Undoped	

## Resistivity

Czochralski (CZ)	From 1 mΩ.cm to 150 mΩ.cm
Float Zone (FZ)	Up to 10 mΩ.cm
Orientation	<100>, <111>, <110>
Tolerance	Standard: ± 0.5°
Off orientation	Up to 40°

## Additional specification

	1"	2"	3"	4"	5"	6"
TTV Std (μm)	<10	<10	<10	<10	<10	<10
STIR Std (μm)	<2	<2	<2	<2	<2	<2
GLOBAL TIR (μm)	<5	<5	<5	<5	<5	<5
Roughness	On polished surface: <1 nm					
Flatness	On polished surface: <1 μm					

Surface	As Cut	Lapped	Etched	Single side polished	Double side polished
---------	--------	--------	--------	----------------------	----------------------

## Applications

- ✓ Manufacturing of semiconductors
- ✓ Laptops and Desktop computers
- ✓ Mobile smartphones, tablet-phones
- ✓ Wearable smart gadgets Home appliances
- ✓ Microchips
- ✓ Thin-film deposition process
- ✓ Calibrating instruments
- ✓ R&D and manufacturing
- ✓ Automobiles, aerospace and drone technology
- ✓ AI (Artificial Intelligence)
- ✓ MEMS fabrication
- ✓ Transistors, diodes, and rectifiers
- ✓ Robotics
- ✓ Solar cell
- ✓ Ics (Integrated Circuits)
- ✓ High-power applications (detectors and sensor devices)
- ✓ Opto-Electronic components

**P** Type  
**N** Type

Follow us:

[f](#) [@](#) [t](#) [in](#) | [www.nanoshel.com](http://www.nanoshel.com) | [sales@nanoshel.com](mailto:sales@nanoshel.com)

**INTELLIGENT MATERIALS PVT LTD**  
Derabassi  
Punjab (140507)  
INDIA

**NANOSHEL UK LIMITED**  
Chapel House,  
Chapel St Cheshire,  
CW12 4AB United Kingdom

**NANOSHEL LLC**  
3422 Old Capitol Suit  
1305 Wilmington DE - 19808  
United States

ISO 9001:2015  
CERTIFIED COMPANY



+91 9779 550077, 9779238252

+44 (0) 74 105 488, +44 203 137 5187

+1 646 470 4911

20ZICE4589C

19ZAZG01274G

20ZICE4588M