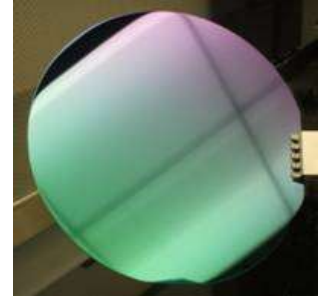


## DATA SHEET – 6 INCH SILICON WAFER

### Orientation

On standard:  
(100) (111) (110)

On request:  
(211) (311) (411) (511) (711) (911)  
(210) (310) (510) (910)  
(531) (731)



Standard Tolerance:  $\pm 0.5^\circ$ , on request:  $\pm 0.02^\circ$

### OFF Cut

Compared to ON axis (100), (111), (110), (112): Up to  $14^\circ \pm 0.02^\circ$

### Type

**P-type:** Boron

**N-type:** Phosphorus, Arsenic, Antimony

**Undoped**

### Resistivity

**Cz:** from  $1\text{m}\Omega\cdot\text{cm}$  to  $150\ \Omega\cdot\text{cm}$

**FZ:** up to  $10\text{k}\ \Omega\cdot\text{cm}$

**Intrinsic:**  $> 200\ \Omega\cdot\text{cm}$

### General specifications

**Standard Diameter:** 6 inch (150mm)  $\pm 0.2\ \text{mm}$

**Standard Thickness:**  $675\ \mu\text{m} \pm 20\ \mu\text{m}$

**Standard TTV:**  $< 10\ \mu\text{m}$

**TTV min SSP:**  $10\ \mu\text{m}$

**TTV min DSP:**  $3\ \mu\text{m}$

**Minimum Thickness:**  $150\ \mu\text{m} \pm 10\ \mu\text{m}$

**Maximum Thickness:** 10 mm

**Best TTV for non-standard thickness:**  $5\ \mu\text{m}$

**Particle count:** 10 – 25

**Bow:**  $30\ \mu\text{m}$

**Roughness:** On polished surface:  $< 0.5\ \text{nm}$

**Flatness:** On polished surface:  $< 0.1\ \mu\text{m}$

## DATA SHEET – 6 INCH SILICON WAFER

### Laser marking

On Request

### Thermal Oxidation

Oxidation type	Thickness	Tolerance
Wet oxidation	200 – 3000 nm	±10 %
Standard dry oxidation	15 – 100 nm	±5 %

**Option:** Single face oxidation (photolithography)

### Single layer deposition / metallization

Layer	Method	Thickness	Tolerance
Cr, Ti, Au, Al, Pt, Mo, W Highly reflective silver coating	PVD sputtering	200 – 1000 nm Depending on metals	±10 %
Ni, Cu, Ir, Ta, Al <sub>2</sub> O <sub>3</sub>	evaporation		
Cr/Au TiW with Ti : 10% W : 90% TiW /Au with Ti : 10% W : 90% Ti/Pt	PVD		

### Multi layers deposition

On Request

Example:

