

# Product-Solar Wafer



WF Category	Multicrystalline	Monocrystalline
	156mm	156mm
Dimensions (C,D) mm	156.0±0.5mm	156.0±0.5mm
Diagonal Length (E) mm	200.0±0.5mm	200.0±0.5mm
Thickness	200± 20μm (180~220um)	200um -10um ,+20um (190 ~220um)
Corner Length (G) mm	15.4±0.5mm	15.4±0.5mm
Resistivity (Per Wafer)	0.5 to 3 Ohm.cm	0.5 to 3 Ohm.cm Or 0.5 to 2.5 Ohm.cm
Life time ( u sec )	3usec up	3usec up
	Customer specified	
TTV ( Max)	30 um	30 um
Warpage (Max )	50 um	50 um
Oxygen	Customer specified	Customer specified
Carbon	Customer specified	Customer specified
Saw marks depth (Max)	20 um	20 um
Package	Manufacturer's STD package	

# Product-Semiconductor Wafer



WF Category		Test / Prime	Test / Prime	Coin & Roll / Dummy / Test		Mechanical
		100mm	150mm	200mm	300mm	450mm
Diameter		100±0.5mm	150±0.5mm	200±0.5mm	300±0.2mm	450±mm
1	Type	Customer specified			P	P
2	Thickness	505±25um	675±25um	Customer specified		925±25um
				Low Thickness Bump & TSV		
3	Backside Finish	Etched	Etched	DSP / Etched	DSP	DSP
4	Notch / Flat	Flat	Flat	Semi / JEIDA	<110>	<110>
5	Local Flatness	Customer specified ( Super Flatness / Normal Wafer)				GBIR, less than 10um
6	Bow	Customer specified			< 30um	<100um
7	Warpage	Customer specified			< 50um	<100um
8	Surface Metal impurity	5E10at/cm2	5E10at/cm2	1E10at/cm2 5E10at/cm2	1E10at/cm2	1E10at/cm2
9	Particle	@0.3um	@0.2um	0.065um 0.12um	0.037um 0.05um 0.065um 0.12um 0.2um	N/A
10	Laser mark	Customer specified				N/A
11	Packing	Manufacturer's STD package				
12	Bow					< 100 um
13	Warpage					< 100 um

# Product- Sapphire Wafer



WF Category	4 Inch	6Inch
Dimensions (C,D) mm	100±0.05mm	150.1±0.1mm
Surface Orientation (M-Plane)	(0001)+0.35° off Axis 0.05°	(0001) +0.35
Surface Orientation (A-Plane)	(0001)±0.1°	0±0.1
Flat Orientation	-	0±0.2
Thickness	650±20um	
TTV (Max)	< 10 um	
Warpage (Max)	50um	
Baw	± 10um	
Flatness	< 5um	
EPD	< 1000 ea.cm2	< 1000 ea.cm2
Defect	Chipping Length : <0.3mm Chipping Width : <0.7mm	Pore, Chip, Twin,etc : < 10%
Surface Condition	Ra < 2A	
Backside	Fine Grinder Ra <1.1um (Tencor 기준)	
Package	Manufacturer's STD package	Manufacturer's STD package

# Product- Film Deposition Service



No.	WF Size			Classification
	6"	8"	12"	
1	-	0	0	P-TEOS
2	0	0	0	Thermal Oxide
3	0	-	0	Thermal Oxide 1000A + Al 8000A
4	-	-	0	CVD Oxide ( ALD HfO , ZrO2)
5	0	0	0	Nitride
6	0	0	0	Poly
7	-	0	0	HDP
8	-	0	0	Cu
9	-	0	0	TIN
10	-	0	0	Arc , PR
11	-	-	0	BPSG + Anneal