

SPECIFICATION OF THIN FILM SOI WAFERS

Parameter	Unit	Specification	
		150 mm	200 mm
SOI layer			
Edge exclusion	mm	< 5	
Silicon layer thickness	nm	200 – 1000	90 – 1000
Uniformity	nm	± 20	± 12
Type of conductivity		P-type / (B)	
Resistivity	Ohm·cm	As agreed with the customer	
Orientation		<100>	
Non-bonding areas >0,5 mm in diameter	pcs.	0	
Surface roughness in the area of 2x2 μm	nm	< 0,5	< 0,3
Metal contamination Fe, Cu, Cr, Ni, Zn, Na, Ca, K, Al (for each element separately)	at./cm ²	< 5·10 ¹⁰	
Light scattering defects >0,2 μm	pcs.	< 50	< 65
HF-defects	at./cm ²	< 0,5	< 0,3
Buried oxide			
Oxide thickness	nm	100 – 2000	
Uniformity	%	< 5	
Silicon substrate			
Type of conductivity		P-type / (B)	
Resistivity	Ohm·cm	As agreed with the customer	
Orientation		<100>	
Flat size	mm	57,5±2,5	notch
Flat orientation		<110>	