

IMSi Oxide Wafer 200mm & 300mm



Silicon wafer deposited oxide layer due to its excellent dielectric properties which is widely applied in semiconductor industry. Thermal Oxide is typically grown in a diffusion furnace (either vertical or horizontal one) and is grown at high temperatures from 800°C to 1200°C via either a "Wet" or "Dry" growth technique. USIC provides high quality thermal oxide wafers especially in diameter of 200mm and 300mm.

Our "IMSi Oxide Wafer" uses thermal deposited oxide layer. Compared with CVD technique, it has demonstrated higher uniformities, less defects, and higher dielectric strength than that of CVD deposited oxide layer. "IMSi Oxide Wafer" has successfully passed and qualified by several tier 1 company in foundry and OSAT field.

Parameter	Specification	
Diameter (mm)	200	300
Thickness (µm)	725±25	775±25
Growth Method	MCZ/CZ	
Туре	P/N	
Dopant	B, Ph, As, Sb	
Crystal Orientation	<100>	
Resistivity (Ohm-cm)	0.1-100	
TTV (µm)	≤25	
Bow/Warp (µm)	≤50	
Oxide Layer Thickness (Å)	1,000-20,000	
Oxide Layer Thickness Tolerance (%)	±5	
Particle	≥0.3µm Max 30ea or N.S	