

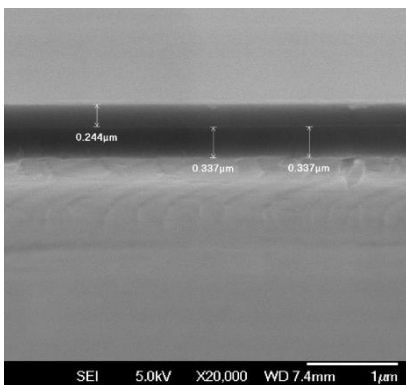
Applications

Our customised Thin-SOI solutions are suitable for the following fields:

- RF Filters
- Optoelectronics
- Image Sensing
- Wireless Connectivity
- Flexible-Hybrid Electronics
- RF MEMS

End Markets:

- Telecommunications
- Consumer
- Power
- Medical

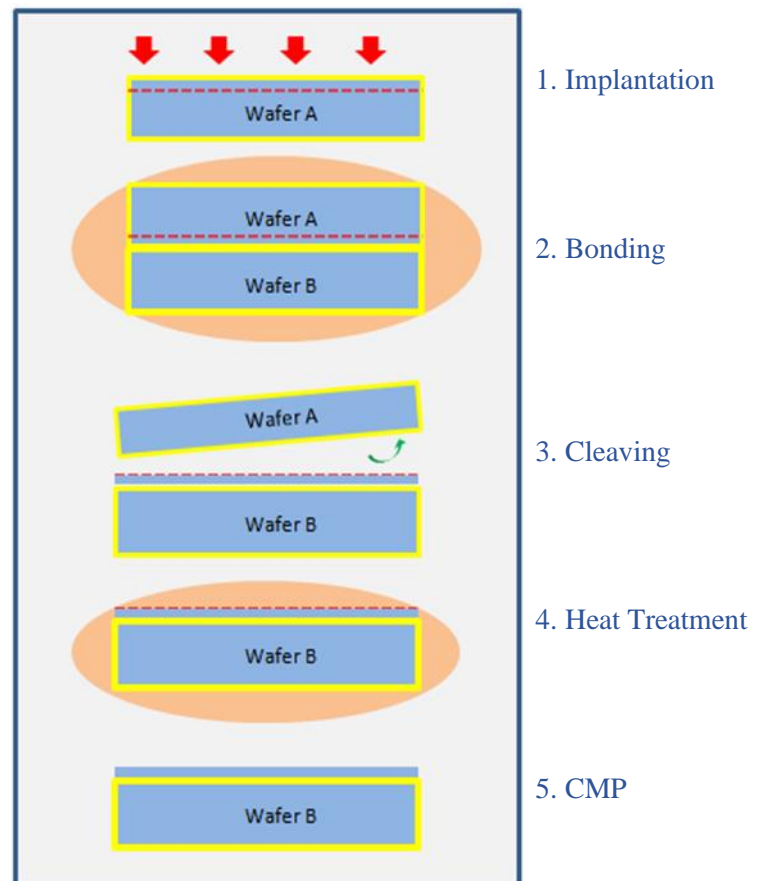


SEM image of IceMOS 245nm Thin-SOI Wafer

IceMOS Technology has developed and is offering a Thin-SOI wafer range with device layers <math>< 1\mu\text{m}</math>. Building on the 20+ years of SOI manufacturing experience, IceMOS is able to offer the same high-quality product as our existing Thick-SOI wafers.

With the wide range of specifications offered for both silicon wafers and the thermally grown Buried Oxide Layer, the IceMOS Thin-SOI wafer range covers applications from Silicon Photonics to SAW filters

By making continuous improvements to our processes in a Lean Six Sigma environment, IceMOS Technology offer world class product quality, competitive cost structure plus rapid turnaround makes IceMOS Technology your ideal SOI partner.



SOI Specification

Parameter	Specification Range
Wafer Diameter	150 – 200 mm
<i>Handle Layer Specifications</i>	
Dopant Type	N or P
Doping	N type: Phos, Sb & As P type: Boron
Resistivity	$\leq 0.001 - \geq 10000 \Omega\text{-cm}$
Growth Method	CZ, MCZ or FZ
<i>Buried Oxide Specifications</i>	
Thermally Oxidised Buried Oxide Thickness	0.1 μm – 2 μm grown on Device or both wafers
Buried Oxide Uniformity	$\pm 5\%$
<i>Device Layer Specifications</i>	
Device Layer Thickness	0.1 μm – 1 μm
Device Layer Uniformity	$\pm 20\text{nm}$
Dopant Type	N or P
Doping	N type: Phos, Sb & As P type: Boron
Resistivity	$\leq 0.001 - \geq 10000 \Omega\text{-cm}$
Growth Method	CZ, MCZ or FZ
Crystal Orientation	<100>, <111> or <110>

The above is a standard IceMOS specification; however, we are always happy to work with our customers to engineer specific solutions. If you would like to discuss an alternative specification, please contact our sales team:
sales@icmostech.com