

OKMETIC



OKMETIC BONDED SOI WAFERS ENABLE IMPROVED DEVICE DESIGNS

BSOI

Fully customizable with starting materials from in-house crystal growth and wafering.

0.3-SOI

Improved device layer thickness tolerance $\pm 0.3 \mu\text{m}$.

E-SOI®

Highly uniform wafers with device layer thickness tolerance $\pm 0.1 \mu\text{m}$ independent of layer thickness.

C-SOI®

Wafers with pre-etched cavities. Fully in-house C-SOI® process flow from silicon crystal growth to cavity patterning and SOI wafer manufacturing.

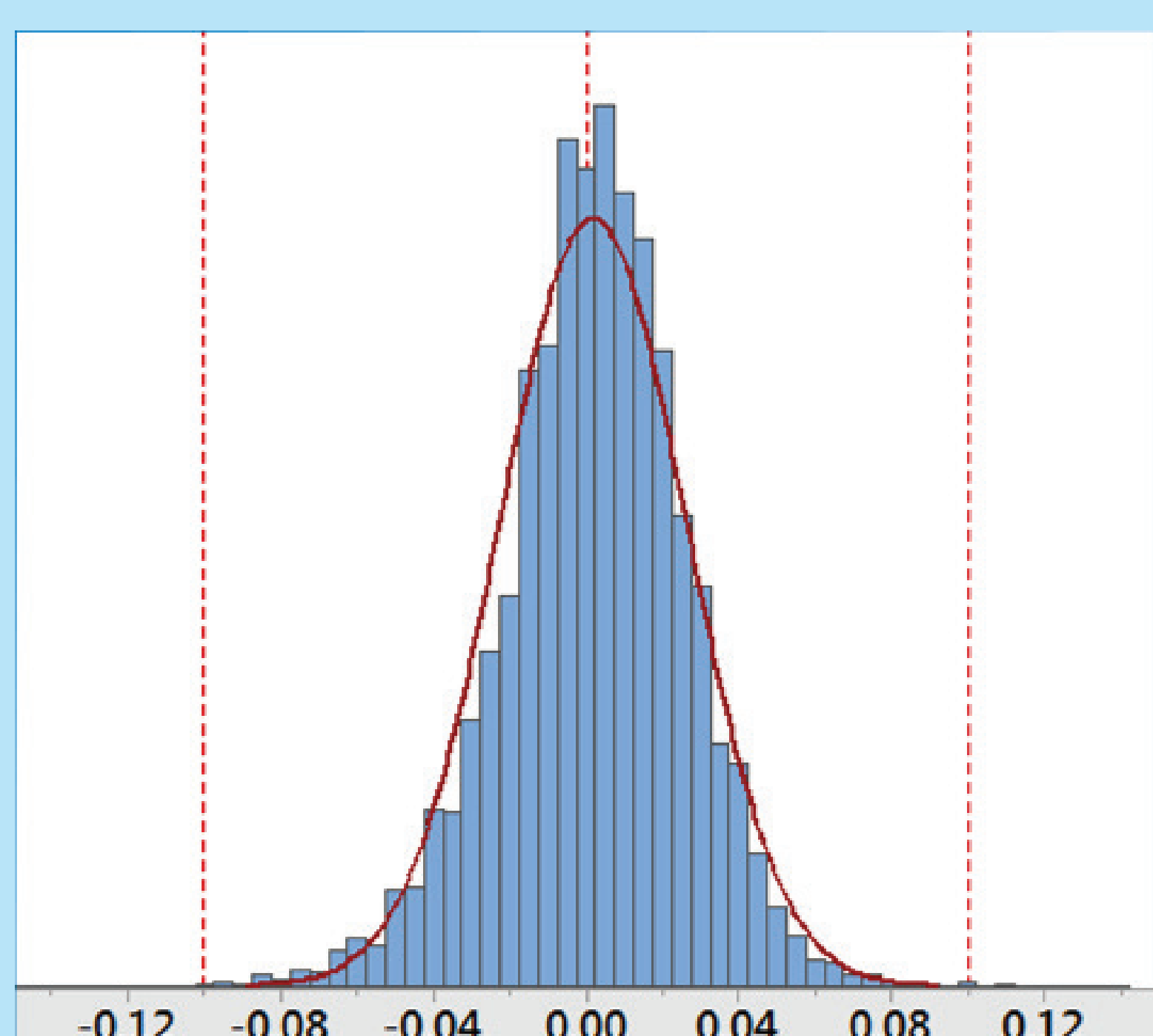
L-SOI

Low resistivity SOI device layers.

EC-SOI

Combination of highly uniform E-SOI® wafer with cavity structures of C-SOI® wafer.

Device layer thickness capability of E-SOI® wafers



Deviation from target thickness (μm)

TYPICAL SOI SPECIFICATIONS

RESISTIVITY

From < 0.001 to $> 7,000 \text{ Ohm-cm}$

DEVICE LAYER THICKNESS

From $1 \mu\text{m}$ to $> 200 \mu\text{m}$

Tolerance $\pm 0.5 \mu\text{m}$ (standard BSOI), $\pm 0.3 \mu\text{m}$ (0.3 SOI), $\pm 0.1 \mu\text{m}$ (E-SOI®), $\pm 0.7 \mu\text{m}$ (C-SOI®)

HANDLE WAFER THICKNESS

From $300 \mu\text{m}$ to $950 \mu\text{m}$, typically $725 \mu\text{m}$ in 200mm wafer and $380 \mu\text{m}$ in 150mm

Back surface polished or etched

BURIED OXIDE

Type: thermal oxide, thickness: from 300 nm to $4 \mu\text{m}$, typically between $0.5 \mu\text{m}$ and $2 \mu\text{m}$

