

Okmetic Showcasing High Resistivity Silicon Wafers for Superior RF Filter and Device Performance at Booth #1816

Vantaa, Finland, June 13, 2025 – Okmetic, the leading supplier of advanced silicon wafers for the RF market is showcasing its products at the International Microwave Symposium. Come meet our experts at booth #1816 to discuss how our wafer solutions can enhance your RF device performance.

Okmetic is the leading supplier of advanced silicon wafers for the RF market. Our <a href="https://high.ncbi.nlm.nih.gov/high.ncbi.n

Our RFSi® wafer portfolio in 150-200 mm includes:

High Resistivity SSP or DSP wafers

- Resistivities up to >10 kOhm-cm
- With or without highly efficient trap-rich layer
- Option for <700nm TTV

RF GaN Substrate wafers for GaN-on-SI and GaN-on-SOI applications

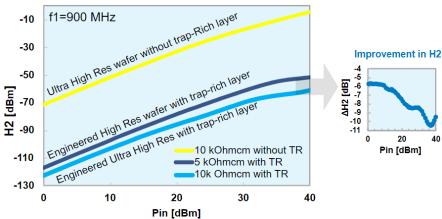
• Extra thick <111> MCz wafers

High Resistivity Bonded SOI wafers with or without cavities

Engineered High Resistivity wafers enabling minimal RF losses

Our <u>Engineered High Resistivity</u> and <u>Engineered Ultra High Resistivity wafers</u> offer exceptional linearity and minimal losses in RF devices, thanks to their dual properties: high resistivity silicon mitigates bulk conductivity, while the trap-rich layer reduces surface conductivity. These properties are crucial for addressing the challenges presented by new 5G bands and higher frequencies, as they balance steep skirts, low insertion losses, and wide bandwidths in RF filters and devices.

Exceptional second harmonics using Engineered Ultra High resistivity wafer with trap-rich layer



Measured with 2mm length 50Ω CPWs by Incize.

Our Engineered Ultra High Resistivity SSP and DSP silicon wafers, featuring resistivity over 10,000 Ohm-cm and an efficient trap-rich layer, are optimized for demanding RF filter applications. These wafers provide the highest effective resistivity, virtually eliminating substrate-induced losses and nonlinearities, and offering superior 2nd harmonic and intermodulation distortion (IMD) values.



RF GaN Substrate wafers offering advanced stress management and slip resistance

Power management in RF world uses thick <111> oriented high resistivity wafers as a platform for GaN-on-Si applications. Our RF GaN Susbstrate wafers are designed to endure the extreme stresses of the RF GaN epi process and to drive the insertion losses lower, which makes them optimal platforms for Power management in the dense 5G base station network. This unique substrate option is manufactured with the Magnetic Czochralski crystal growth method and can't be manufactured with the other commonly used crystal growth method Float Zone.

About Okmetic

Okmetic, founded in 1985, is the leading supplier of advanced silicon wafers for MEMS, sensor, RF, and power devices. The company's extensive 150 to 200 mm wafer portfolio includes a wide range of High Resistivity RFSi® wafers, Power Device wafers, and MEMS wafers. The selection covers bonded SOI, SSP, DSP, and patterned wafers, as well as TSV and GaN substrate wafers.

Okmetic has a worldwide sales organization, and its headquarters are located in Finland, where the majority of its silicon wafers are manufactured. Okmetic fab expansion, focusing on 200 mm SSP and DSP wafers, will be operational in 2025. Learn more about Okmetic at www.okmetic.com.

Come visit our booth #1816 or pre-book an appointment:

Galya Stoeva

Vice President, Sales North America galya.stoeva@okmetic.com +1 9254814854

Petri Santala

Senior Manager, Technical Customer Support petri.santala@okmetic.com +1 4697771875