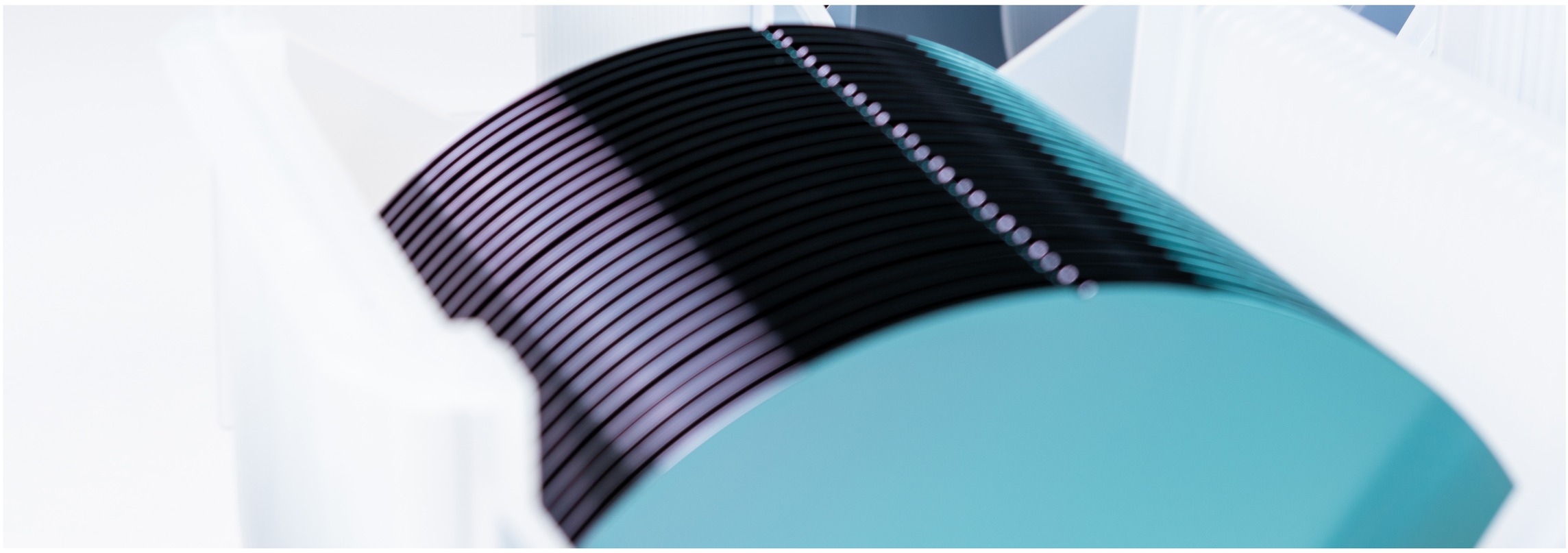
OKMETIC



HIGH RESISTIVITY RFSI® WAFERS FOR SUPERIOR RF DEVICE PERFORMANCE

RFSI® WAFERS – optimized for RF devices

High Resistivity wafers Low loss RF IPD or Integrated RFFE / RFIC substrate

Engineered High Resistivity wafers Extremely low loss substrate with >7 kOhm-cm resistivity and trap-rich layer for RF filters

UF-RFSi® Engineered low loss substrate with Ultra Flat geometries for e.g. Thin Film SAW

Engineered Ultra High Resistivity wafers close to zero loss substrate with >10 kOhm-cm resistivity and trap-rich layer for demanding RF devices

High Resistivity BSOI Bonded - BSOI or suspended cavity C-SOI® low loss structures per Customer design, e.g. BAW resonator

RF GaN Substrate wafers standard to extra thick <111> wafers with advanced stress management

SUPERIOR PERFORMANCE AND LOWER TOTAL COST OF OWNERSHIP

- Production proven solutions at leading RF device manufacturers
- Optimized solutions for BAW and TF-SAW filters, IPD devices, power amplifiers, RFIC and silicon interposers
- Superior performance in 2nd harmonics, insertion losses, IMD3 and Q-values
- MCz enables high resistivity by lower Oxygen concentration compared to standard Cz
- Better slip resistance, mechanical properties and radiation hardness compared to FZ
- Available in 150 and 200 mm diameter (>10 kOhm-cm resistivity wafers only in 200 mm) and also in <111> crystal orientation

DOPANT	ORIENTATION	THICKNESS	RESISTIVITY	OXYGEN CONTENT (ASTM F121-83)
Boron	<100>, <111>	380 – ≥ 1,150 µm	>5,000 Ohm-cm >10,000 Ohm-cm	<10 ppma, MCz <5 ppma, A-MCz®
Phosphorus	<100>	380 – ≥ 1,150 µm	>5,000 Ohm-cm >7,000 Ohm-cm	<10 ppma, MCz <5 ppma, A-MCz®