OKMETIC

HIGH RESISTIVITY RFSI® WAFERS - SUPERIOR RF DEVICE PERFORMANCE

RFSI® WAFERS - HIGH RESISTIVITY FOR RF FILTER AND DEVICE NEEDS
- High Resistivity wafers (Low loss RF IPD or Integrated RFFE / RFIC substrate)
- Engineered High Resistivity wafers (Added trap-rich layer for lowest lost substrate for RF filter applications)
- UF-RFSI® (Engineered low loss substrate with Ultra Flat properties for e.g. Thin Film SAW)
- High Resistivity BSOI (Bonded - BSOI or suspended cavity C-SOI® low loss structures per Customer design, e.g. BAW resonator)
- RF GaN wafers typically extra thick <111> wafers (GaN-on-Si RF Power device substrate with advanced stress management)

SUPERIOR PERFORMANCE AND LOWER TCO
- Production proven solutions at leading RF device manufacturers
- Optimized solutions for BAW and SAW filters, IPD devices, Power Amplifiers, Integrated RFIC & PA and Silicon Interposers
- Superior performance in 2nd Harmonics, Insertion losses, Intermodular Distortion 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 200mm diameter and also in <111> crystal orientation

<table>
<thead>
<tr>
<th>DOPANT</th>
<th>ORIENTATION</th>
<th>THICKNESS</th>
<th>RESISTIVITY</th>
<th>OXYGEN CONTENT (ASTM F121-83)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boron</td>
<td>&lt;100&gt;</td>
<td>380 – ≥ 1,150 µm</td>
<td>&gt;5,000 Ohm-cm, &gt;7,000 Ohm-cm</td>
<td>&lt;10 ppma, MCz, &lt;5 ppma, A-MCz®</td>
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