

Silicon Wafer Supplier Okmetic Expands Its RFSi™ Portfolio with Tailored Silicon Substrate for Thin Film Surface Acoustic Wave Hybrid Structures

The Game-Changing Technology Combines Low-Loss Crystal Material and Engineered Films to Create the Industry's First Wafer with Ultra-Flat Properties

Vantaa, Finland – March 30, 2021 – Okmetic, the leading supplier of advanced silicon wafers for the manufacture of microelectromechanical systems and sensors, today announced the release of UF-RFSi®, a tailored silicon substrate dedicated for thin film surface acoustic wave (TF-SAW) hybrid structures. As the industry's first wafer with ultra-flat properties, UF-RFSi leverages Okmetic's proprietary A-MCz®-silicon material technology to deliver improved technical performance with high resistivity, ultra-low loss radio frequency (RF) specifications.



Okmetic's UF-RFSi® is a tailored silicon substrate dedicated for thin film surface acoustic wave hybrid structures.

For the last several years, Okmetic has been rapidly gaining market share as a specialty silicon wafer supplier among the industry's leading RF manufacturers and is projected to almost double its RFSi™ wafer shipment volume in 2021. The newest member of Okmetic's RFSi portfolio, UF-RFSi, embodies over 35 years of experience supplying specialty wafers for advanced RF applications and filters alongside wafers for microelectromechanical systems (MEMS) and sensors.

"The release of UF-RFSi is particularly exciting for us because it comes on the heels of Okmetic delivering its two millionth wafer to the RF market," says Atte Haapalinn, chief technology officer of Okmetic. "After numerous customer requests, we are thrilled to introduce the industry's first wafer with ultra-flat properties, optimized specifically for TF-SAW hybrid structures. This innovation enables customers to achieve the most challenging active layer geometries in a cost-effective manner. Additionally, the design flexibility makes the wafer a high performance and cost-effective solution for demanding filter and RF technology."

The RFSi portfolio is a family of specialty wafers that reaches over 7,000 ohm-centimeters of bulk resistivities combined with advanced surface engineering. As the newest member of the RFSi portfolio, UF-RFSi features stable resistivity, low insertion loss and superior linearity performance when compared to competitive offerings. Building on decades of innovative

substrate manufacturing expertise, the wafer delivers excellent RF performance with superior planarization efficiency to simplify the manufacturing of hybrid structures. Boasting a Total Thickness Variation (TTV) below 700 nanometers, the ultra-flat wafer can undergo a fully customizable wafering process, providing customers with tailored solutions and optimized configurations that meet their specific product, process and technology needs.

Availability

UF-RFSi wafers are offered in 150 and 200 millimeter diameters. Sample shipment order intake will begin in the second quarter of 2021. For sales information and custom quotes, please contact your regional sales representative.

About Okmetic

Okmetic, founded in 1985, is the seventh largest silicon wafer manufacturer in the world and the leading supplier of advanced, high value-added, silicon wafers for the manufacture of microelectromechanical systems (MEMS) and sensors, as well as discrete semiconductors and analog circuits. Okmetic's silicon wafers provide a highly functional and reliable platform for the manufacture of various everyday applications, including smartphones, portable devices, automotive electronics, industrial process control and medical applications, the Internet of Things (IoT), as well as different solutions related to power supply and efficiency improvement. Okmetic's extensive product portfolio includes 150 to 200 millimeter Single Side Polished (SSP), Double Side Polished (DSP), Silicon On Insulator (SOI), and High Resistivity RFSi™ wafers.

Okmetic has worldwide sales organizations in Europe, the United States, Japan and the Asia-Pacific region. The company has strong presence in the US as a result of establishment of US sales office in 1999. The company's headquarters is located in Finland, where the majority of its silicon wafers are manufactured. Okmetic's operations rely on quality and environmental systems in line with the ISO 9001:2015, ISO 14001:2015, and IATF 16949:2016 standards. To learn more, visit www.okmetic.com.

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