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FINITE ELEMENT ANALYSIS OF AIN/Si THIN FILM RESONATOR

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Abstract : This paper aim to study the influence of thin film thickness on the surface acoustic wave and reflectivity in AlN/Si resonator with Al electrodes, using finite element analysis. Mode shapes of the device as a function of frequency thickness were presented and results were obtained to optimize the design of SAW thin film devices that can work in high frequency.

Keywords : Surface acoustic wave, thin film resonator, FEM analysis