

## Microwave characterization of thin film BST material using a simple measurement technique

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Thin film barium strontium titanate (BST) in the parallel plate capacitors is characterized at microwave frequencies using a simple measurement technique. Short standards are fabricated on the same wafer as the BST capacitors to remove the parasitics of pads, lines, discontinuities and electrodes. The dielectric constant of the patterned BST thin film in the parallel plate capacitor is found to be frequency independent up to 10 GHz. The average loss tangent of BST thin film for the sample under test is approximately 0.006 and also found to be frequency independent up to 10 GHz.

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