

Fabrication of polyimide - boron nitride composite film

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Recently, due to the rapid development of information and communication technology, the development of various electronic devices such as smartphones are accelerating. From the perspective of various electronic components, especially circuit boards, the development of materials with low dielectric constant and low dielectric loss to minimize transmission loss is required. Many researchers have conducted various studies for low dielectric constant by introducing inorganic fillers into polymer matrix, such as SiO₂, CDO(Carbon-doped oxide). Among them, boron nitride(BN) has insulating properties, and is known as a material with high potential of low dielectric constant ($\epsilon < 3$). In this study, a polyimide - boron nitride composite film with low dielectric properties was fabricated using boron nitride nanopowder.