Aerosol Deposition에 의한 Embedded Capacitor의 제조 및 특성 평가

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Product and Properties of Embedded Capacitor by Aerosol Deposition

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Abstract : Aerosol Deposition(AD) method is based on the impact consolidation phenomenon of ceramic fine particles at room temperature. AD is promising technology for the room temperature deposition of the dielectrics thin films with high quality. Embedding of passive components such as capacitors into printed circuit board is becoming an important strategy for electronics miniaturization and device reliability, manufacturing cost reduction. So, passive integration using aerosol deposition. In this study, we examine the effects of the characteristics of raw powder on the thickness, roughness, electrical properties of $BaTiO_3$ thin films. Thin films were deposited on the copper foil and copper plate. Electrical and material properties was investigated as a change of annealing temperature. We final aim the effects of before and after of laminated on the electrical properties and suit of embedded capacitor.

Key Words : Aerosol Deposition, Embedded Capacitor, $BaTiO_3$