레이져 주사법을 이용한 박막 물성 측정 (Measurement of Material Property of Thin Film using Laser Scanning Method)

이상순 한국기술교육대학교 메카트로닉스 공학부

Abstract

Polymeric materials are widely used in the electronic industry as a common dielectric material or adhesive. The polymeric layer coated on Si substrate can be subjected to thermal stresses due to difference in thermal expansion coefficients. The mismatch in thermal properties between the polymeric layer and the substrate results in significant residual stresses. In this study, the thermal deformation is measured by a curvature measurement method using laser scanning, and the elastic modulus is calculated by an analytic model.