# Abstracts

## A modified open-ended coaxial probe for concave surface coating materials testing

*A.-K.A. Hassan, Deming Xu, Lin Zhang, Maode Niu and YuJian Zhang. "A modified open-ended coaxial probe for concave surface coating materials testing." 2000 MTT-S International Microwave Symposium Digest 00.3 (2000 Vol. III [MWSYM]): 1867-1870.*

In this paper, a technique to modify finite flange open-ended coaxial probe for concave surface coating materials testing is proposed. It is found from FDTD modeling and experimental results that by extending the inner conductor throughout the air gap between the probe and the sample and adding a ring patch at the conductor end, reflection coefficient measurement accuracy is highly improved. The modified coaxial probe has been designed and used to measure EM-properties of microwave absorbing material coated on concave surface box for shielding. Preliminary results of /spl epsi/* and /spl mu/* are relatively in agreement with those of a planar sample, determined using standard coaxial probe. It has been demonstrated that the technique is promising for nondestructive testing of curved surface coating materials and other applications.

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