Abstracts

Characterization of Small Apertures in the Center Conductor of a Microstrip Line (Short Papers)

K.S. Rao and V.M. Pandharipande. "Characterization of Small Apertures in the Center Conductor of a Microstrip Line (Short Papers)." 1994 Transactions on Microwave Theory and Techniques 42.5 (May 1994 [T-MTT]): 907-910.

A closed form expression for the series reactance of an electrically small aperture in the center conductor of a microstrip line is determined using equivalent dipole moments due to the aperture and employing a quasistatic approach. The reactance of an inclined slot and a diamond shaped aperture are evaluated as a function of the aperture geometry in the lower microwave frequency band. The results based on this analysis are compared with those obtained from Oliner's formula. Experimental results are in fairly good agreement with the results obtained using the proposed theory.

❑ Return to main document.