Abstracts

Full-Wave Analysis of Aperture Coupled Microstriplines

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Two methods are presented for the analysis of aperture coupled microstrip lines. Assuming a quasi-TEM traveling wave incident on the feeding line, an expression for the wave on the coupled line is derived. First the moment method is used and the current on the coupled line is represented by a traveling wave propagating away from the slot. In the second method, coupled and the results the reciprocity theorem is applied to the line. An equivalent circuit is derived S parameters are computed. Theoretical are verified with measurements.

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