Abstracts

Multimode Network Representation for H- and E-Plane Uniform Bends in Rectangular Waveguide

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In this paper we describe new multimode network representations for both H- and E-plane uniform bends in terms of impedance and admittance multimode coupling matrices, respectively. The key element of the network is the transition from the straight waveguide to the curved waveguide. The relevant multimode equivalent network representation is obtained following a simple procedure that has been used already with success for other types of junctions involving straight waveguides. In t he talk, the details of the formulations will be discussed together with comparisons between our simulations and available published data, both measured and theoretical, indicating very good agreement as well as very good computational efficiency.

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