Abstracts

Power Density Distribution Analysis of Ferrite Loaded Finlines for the Development of Integrated Nonreciprocal Millimeter Wave Elements

A. Beyer and I. Wolff. "Power Density Distribution Analysis of Ferrite Loaded Finlines for the Development of Integrated Nonreciprocal Millimeter Wave Elements." 1984 MTT-S International Microwave Symposium Digest 84.1 (1984 [MWSYM]): 342-344.

A hybrid mode field analysis for a finline loaded with a ferrite- and additionally a dielectric speciem is presented. Using this theory the power density distribution of forward and backward waves is calculated and demonstrated. The results are used to design a finline isolator for the 28.5 GHz range with a bandwidth of 2 GHz, an insertion loss smaller than 1.2 dB and an isolation higher than 39 dB.

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