Abstracts

Leaky-wave characteristics of trapezoidally shaped NRD-guide suitable for design of millimeter-wave antenna

S.J. Xu, X.Y. Zeng, Ke Wu and K.M. Luk. "Leaky-wave characteristics of trapezoidally shaped NRD-guide suitable for design of millimeter-wave antenna." 1998 MTT-S International Microwave Symposium Digest 98.2 (1998 Vol. II [MWSYM]): 659-662.

Leaky-wave characteristics of NRD guide with various shapes of trapezoidal cross section are systematically modeled and analyzed by a method which combines effectively a multimode network theory with a mode-matching technique. Emphasis is laid on the investigation of parametric effect of trapezoidal dimensions on the leakage of NRD guide. Extensive numerical results are given to establish some useful guidelines for the design of a new type of NRD-guide leaky-wave antennas.

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