Abstracts

Finite Curvature and Corrugations in Dielectric Ridge Waveguides

T. Rozzi, G. Cerri, F. Chiaraluce, R. De Leo and R.F. Ormondroyd. "Finite Curvature and Corrugations in Dielectric Ridge Waveguides." 1988 Transactions on Microwave Theory and Techniques 36.1 (Jan. 1988 [T-MTT]): 68-79.

Dielectric ridge waveguide is now widely used in passive and active integrated optics and it could find use in millimeter-wave circuits. Families of devices such as ring lasers and couplers require structures with bends of finite length and relatively high curvature. The paper presents a technique, based on the concept of local modes, which also takes into account the corrugations due to fabrication. Results are in good qualitative agreement with experimental values reported in the literature.

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