Abstracts

Performance and Modeling of Resonantly Enhanced LiNbO/sub 3/ Modulators for Low-Loss Analog Fiber-Optic Links

G.K. Gopalakrishnan and W.K. Burns. "Performance and Modeling of Resonantly Enhanced LiNbO/sub 3/ Modulators for Low-Loss Analog Fiber-Optic Links." 1994 Transactions on Microwave Theory and Techniques 42.12 (Dec. 1994, Part II [T-MTT] (1994 Symposium Issue)): 2650-2656.

The performance of resonantly enhanced LiNbO/sub 3/ traveling wave optical modulators is investigated. High-frequency performance of broad band velocity matched LiNbO/sub 3/ modulators with low half-wave voltages is shown to be relatively independent of termination. A resonant enhancement technique involving external line stretching of the length of the nonactive section of the modulator is proposed and demonstrated at low-frequencies. An accurate model is developed to facilitate design of resonantly enhanced optical modulators.

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