Abstracts

Design of modified phase reversal electrode in broad-band electrooptic modulators at 100 GHz

Kwok-Wah Hui, B.Y. Wu, Y.M. Choi, J.H. Peng and K.S. Chiang. "Design of modified phase reversal electrode in broad-band electrooptic modulators at 100 GHz." 1997 Transactions on Microwave Theory and Techniques 45.1 (Jan. 1997 [T-MTT]): 142-145.

An analysis is given on the modified phase reversal structure of electro-optic modulators. It is shown that the bandwidth to half-wave voltage ratio (BVR) increases with the number of phase reversal sections. Under the assumption that the number of electrode sections is M, a set of M-elements second-order nonlinear equations has been derived and solved by Newton's iteration method. The calculated results provide the optimum overlap integral for each section of a phase reversal modulator in order to "flatten" the frequency response of the device.

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