Abstracts

A Planar Electrooptic Beam Splitter with a Zig-Zag Electrode

C.L. Lee, J.S. Horng and C.H. Huang. "A Planar Electrooptic Beam Splitter with a Zig-Zag Electrode." 1983 Transactions on Microwave Theory and Techniques 31.11 (Nov. 1983 [T-MTT]): 890-897.

A new planar electrooptic beam splitter with a zig-zag electrode is proposed, studied, and demonstrated. The device is simple in its electrode configuration, hence, it is easier to be fabricated and has a potential to operate at higher speeds. Theoretical analyses on a single element of electrodes, as well as on the array structure, have been carried out, and experimental devices have been realized on LiNbO/sub 3/ to demonstrate its characteristics. The experimental results show that the device has a deflection power two times greater than that of a beam splitter with conventional electrodes. In addition, an analysis of the incident angle of the optical beam onto the device shows that the device can be used as a pure beam splitter, a beam deflector, or a combination of the two.

❑ Return to main document.