Abstracts

Polarization-Independent Optical Switch with Multiple Sections of Delta Beta Reversal and a Gaussian Taper Function

O.G. Ramer, C. Mohr and J. Pikulski. "Polarization-Independent Optical Switch with Multiple Sections of Delta Beta Reversal and a Gaussian Taper Function." 1982 Transactions on Microwave Theory and Techniques 30.10 (Oct. 1982 [T-MTT] (Special Issue on Optical Guided Wave Technology)): 1760-1770.

Multiple section Delta Beta reversal polarization-independent integrated optic switches have been designed and demonstrated at a 0.83 µm wavelength. These switches use a Gaussian taper function to achieve low crosstalk in the parallel state. Calculated switch characteristics as related to an ideal Gaussian taper and approximations that can be fabricated by mask making are described. Experimental demonstration shows that these switches have useful switching characteristics with relatively high switching voltages.

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