Abstracts

Integrated Optic Distributed Bragg Reflector Fabry-Perot Modulator for Microwave Applications

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An integrated optic Fabry-Perot modulator is considered. The device, fabricated on III-V materials, uses distributed Bragg reflectors as mirrors. The greatest technical challenge in the realization of this device was the fabrication of the gratings with nanometer feature sizes. First order gratings 0.09pm in width and of 0.8pm in depth were written on a 2mu wide rib waveguide and successfully etched. The design, fabrication, and performance of the device is discussed.

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