Abstract

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130 Gbps low-loss electro-optic modulator based on metal-oxide-semiconductor technology

The design of a novel inexpensive CMOS-compatible compact electro-optic modulator is proposed. The modulator features simple fabrication process with only one mask required for the doping stage. Its performance parameters include a of NRZ modulation speed, ion loss of and a phase shifter length of These numbers make this modulator a good candidate for ultrafast communications applications at the wavelength of