

Application of Semiconductor Optical Amplifiers to Microwave Signal Processing

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This paper amplifiers convertors, proposes an application of semiconductor optical (SOAs) to RF-to-optical and optical-to-RF microwave filters and microwave samplers. The SOA convertor can make it possible to realize a compact and cost-effective radio repeater for RF signal distribution. The SOA filtering and sampling expands application areas of fiber optics to microwave signal processing. The basic performance is experimentally investigated at microwave frequencies and good performance is obtained.

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