

Multigigahertz Monolithic GaAs Optoelectronic Receivers Using 0.2 μm Gate-Length MESFETs

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Two GaAs optical receiver front-ends are reported. Each consists of an MSM photodetector and a transresistance amplifier that drives a 50 Ω load. One amplifier has a measured analog bandwidth of 6.5 GHz and the other 4.5 GHz. The transresistance-bandwidth product for both is a very high 2.1 THz- Ω .

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