Abstracts

40 GHz broadband optical receiver combining a multimode waveguide photodiode flip-chip mounted on a GaAs-based HEMT distributed amplifier

A. Leven, V. Hurm, W. Bronner, K. Kohler, H. Walcher, R. Kiefer, J. Fleissner, J. Rosenzweig and M. Schlechtweg. "40 GHz broadband optical receiver combining a multimode waveguide photodiode flip-chip mounted on a GaAs-based HEMT distributed amplifier." 2000 MTT-S International Microwave Symposium Digest 00.2 (2000 Vol. II [MWSYM]): 683-685.

A 40 GHz bandwidth, 1.55 /spl mu/m wavelength photoreceiver for high-speed digital and microwave-via-fiber applications is presented. The photoreceiver consists of a GaInAs/AlGaInAs/AlInAs multimode waveguide photodiode flip-chip bonded on GaAs-based pseudomorphic HEMT distributed amplifier. The overall conversion gain is as high as 167 V/W.

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