

Abstracts

A 1-5 GHz low-power single-chip receiver IC for optical video distribution system

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A 1-5 GHz low-power single-chip receiver IC has been developed for an optical video signal distribution system. A preamplifier and delay-line type FM demodulator are integrated on to a single-chip using 0.5 μ m Si-bipolar technology. Using this IC, 80 carriers of 64-QAM digital video signals can be successfully transmitted with bit error rates less than 10^{-10} . This IC operates with low power consumption of 0.7 W, which is one of the lowest power consumption figures ever reported for such a device.

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