

OPTICAL RECEIVER

ABSTRACT

This application relates to the field of optical communication technologies, and in particular, to an optical receiver, to provide a technical solution that can reduce electromagnetic crosstalk, so as to improve optical signal reception performance of the optical receiver, and ensure signal transmission accuracy. The optical receiver includes a photodetector and a trans-impedance amplifier that includes a first differential branch circuit, a second differential branch circuit, and a differential amplifier. The first differential branch circuit includes a first capacitor and a first trans-impedance amplifying unit, where an input end of the first capacitor receives an input signal from a power supply end of the photodetector, and an output end of the first capacitor is coupled to an input end of the first trans-impedance amplifying unit. The first differential branch circuit is configured to: amplify the input signal and output a reference signal. The second differential branch circuit is configured to amplify an electrical signal from the photodetector. Signal physical parameter values of the reference signal and an interference signal included in an amplified electrical signal are the same or similar.

Fig. 3