ABSTRACT

CHIP AND OPTICAL COMMUNICATION DEVICE

Embodiments of this application disclose a chip and an optical communication device. The chip may include a substrate, an insulation layer located on a side of the substrate, and a first waveguide and a second waveguide that are in the insulation layer. The second waveguide is located on a side of the first waveguide away from the substrate. The first waveguide has an electro-optic effect. A transmission loss of the second waveguide is smaller than a transmission loss of the first waveguide. In this way, the first waveguide may be used as a part in an active component, and the first waveguide may be used for electro-optic modulation. The second waveguide may be used as a passive component, and the second waveguide is used to transmit an optical signal. A first coupling portion of the first waveguide and a second coupling portion of the second waveguide form a first coupling structure, and the first coupling structure is configured to implement optical coupling between the first waveguide and the second waveguide. Therefore, the active component and the passive component may be integrated by using the first waveguide and the second waveguide, and the chip obtained after integration has a better transmission characteristic and can implement electro-optic modulation, further improving performance of an optical communication system.

[Figure 2]