

The proposed differential optoelectronic coupler contains a semiconductor element with four p - n junctions, which form p - n - p - n structure, and an oscillator. The semiconductor element and the oscillator are made as a monolithic integrated circuit. The oscillator contains two lightguides. The outside p and n areas of the semiconductor structure are accordingly used as the anode and the cathode of the oscillator. The lightguides are accordingly coupled by their end surfaces with the anode and cathode of the oscillator.

The proposed method for producing the optoelectronic coupler consists in producing p - n - p - n structure on a semiconductor substrate and forming the lightguides of the oscillator so that one of the lightguides is coupled with the external p area, and the other lightguide is coupled with the external n area of the p - n - p - n structure.