ABSTRACT

The present application discloses an optical module (90). The optical module comprises a housing (9), a circuit board (91) arranged in the housing (9), an electric driving chip (92), a silicon optical chip (93), a laser (41), and a light guide device (10). The electric driving chip (92) and the silicon optical chip (93) are connected to a first surface (101) of the circuit board (91); the laser (41) is arranged on the surface of one side of the silicon optical chip (93) away from the circuit board (91); the laser (41) emits light and transmits the emitted light to the silicon optical chip (93); the light guide device (10) guides the light emitted by the laser (41) into the silicon optical chip (93). According to the present invention, the silicon optical chip (93) capable of generating heat, a light source assembly (4), and the electric driving chip (92) are located on the surface of the same side of the circuit board (91), such that a heat dissipation assembly (6) can be arranged at a position on the same side of the circuit board (91), and therefore, heat dissipation in the optical module (90) is facilitated, and centralized accumulation of heat in the optical module (90) is avoided; in addition, no grooves need to be dug in the circuit board (91) to contain a heat sink (94), the silicon optical chip (93), and the light source assembly (4), so that the utilization rate of the circuit board (91) is improved, and the manufacturing cost is reduced.

Fig. 4