

OPTICAL TRANSMITTER AND TRANSCEIVER MODULE

ABSTRACT

Disclosed are optical transmitter and transceiver modules for data communication. Such a transceiver module comprises an array of light emitting diodes mounted on a mounting base (140) being arranged in a regular and symmetrical manner in a dome-shaped housing (142). This housing (142) comprises diffusor means for source enlargement. In addition to the transmitter part consisting of said diodes, the transceiver module comprises a receiver. The receiver has four photodiodes (143) arranged below the mounting base (140). These photodiodes are tilted and face in different directions to receive light from all around the module. The photodiodes are protected by a thin wire mesh (145) which serves as Faraday cage to reduce electromagnetic interference. A substrate (144) for electronic circuitry in SMD-Technology is situated underneath the photodiodes (143).

Figure 1