

ABSTRACT

Disclosed are an electro-absorption modulated distributed feedback laser chip and a laser chip encapsulation structure. The electro-absorption modulated distributed feedback laser chip includes a substrate having an upper surface and a lower surface opposite to each other, a laser-emitting portion located on the upper surface of the substrate and configured to emit a laser, a
5 modulating portion located on the upper surface of the substrate and configured to modulate the laser emitted by the laser-emitting portion, a back metal electrode layer located on the lower surface of the substrate, a ground electrode located on the upper surface of the substrate, disposed near the modulating portion, and electrically connected to the back metal electrode layer, a signal
10 electrode located on the upper surface of the substrate, disposed near the ground electrode and the modulating portion, and electrically connected to the modulating portion, and a waveguide structure coupled to the laser-emitting portion and the modulating portion. After the laser chip is encapsulated, the transmission path of a signal circuit and a ground loop is shortened, and parasitic inductance generated by a lead is reduced, the encapsulation bandwidth of the laser chip is
15 improved, and the laser chip is compatible with direct current and alternating current.