

ABSTRACT

Embodiments of this application provide an optical module and an optical communication system, to resolve a technical problem of low heat dissipation efficiency of an optical module. The optical module includes a first device, a second device, and a housing cover. The housing cover includes a first cavity and a second cavity. A working medium in the first cavity is used to dissipate heat from the first device, and a working medium in the second cavity is used to take away heat of the second device. For example, heat of the first device is transferred by means of heat transfer to a surface of the housing cover close to the first device, the heat enters the first cavity via the surface, the working medium in the first cavity transfers the heat to a cavity surface of the first cavity facing away from the first device, and then the heat is transferred to the outside of the optical module via the surface of the housing cover facing away from the first device. The use of separate heat dissipation of the first device and the second device allows for a reduction in power density (power consumption per unit area) on the surface of the housing cover, thereby reducing a dry contact temperature difference, and improving heat dissipation efficiency of the optical module.