Optical Coupler Performance

The optical couplers can be used to create more complicated optical devices, such as M × N optical stars, directional optical switches, different optical filters, and multiplexers.

The optical coupling performance of the coupler was analyzed by investigating the structural characteristics of DCLs, the coupling mechanism, the TECF properties, and the coupling mismatch ...

Coupling at optical frequencies presents challenges to achieving high efficiency, compactness, high fabrication tolerance, and ease of integration in photonic integrated circuits. The paper...

Learn about the different types of couplers used in optical communications and their applications in modern optical networks.

The two mainstream paradigms of fiber-to-chip optical interconnects, namely vertical coupling and edge coupling, have different characteristics, while edge coupling is superior in the ...

Measuring the performance of optical devices is crucial but challenging due to the complex coupling between the input and output fibers with the waveguides, typically achieved ...

The excess loss and output optical power ratio of symmetrical and asymmetrical Y-branch couplers for plastic optical fibers (POFs) are studied in this work. A ray-tracing model for the Y-branch coupler is ...

Our goal is to provide readers with some ideas of the factors that affect the optical performance of the connectors and some relative losses associated with each factor.

Here, we demonstrate a compact, zero-static power, nonvolatile field-programmable coupler array (nv-FPCA), which combines key PIC components (waveguides, couplers, and ...

In this paper, we provide an overview and comparison of devices used for optical waveguide-to-waveguide coupling including inter-chip edge couplers, grating couplers, free form ...

Web: https://safireschools.co.za