

Packaging Photodiode untuk penjumlahan gelombang mikro = Photodiode packaging for microwave summation

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Abstrak

Photodiodes can be used in optical communication systems, but the main application is the dynamic microwave link. For the implementation in the microwave systems, the photodiode should be mounted in the microwave packaging. The packaging must be including the waveguide photodiode and the microwave connector to obtain the microwave signal output.

Penelitian ini akan membahas tentang desain dari modul packaging yang telah dikembangkan untuk mengintegrasikan penempatan photodiode dan mengatur proses alignment dari sinyal laser yang dirambatkan melalui fiber (lens ended fiber). Langkah terakhir adalah menjelaskan proses desain rangkaian bias tee menggunakan software ADS. Perangkat bias tee ini akan ditempatkan di dalam modul yang berfungsi sebagai pengatur terhadap masukan DC atau AC sehingga diperoleh efisiensi dari photodiode.
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In this report, I present the design of module packaging which was developed to make the electrical mounting of the photodiode and make possible the alignment with the lens ended fiber. The last step is to introduce the bias tee design that will be put inside the packaging and the alignment procedure to keep the efficiency of the photodiode.