Noise Characteristics of Erbium-Doped Fiber Amplifiers

In this application note, the performance of different erbium-doped fiber amplifiers (EDFAs) is assessed by measuring the gain and noise figure in the amplification of two optical sources: a tunable laser ...

PDF | Characteristics of noise in Erbium Doped Fiber Amplifier (EDFA) are theoretically analyzed and experimentally verified.

Dependence of the noise characteristics of high concentration erbium doped fiber amplifiers (EDFA"s) on different pumping configurations have been numerically simulated for pump wavelengths of 514.5nm, ...

The noise performance of an erbium-doped fiber amplifier (EDFA) is characterized by modeling optical amplifiers as four-level or three-level systems. The gain and noise performance are then examined ...

This paper presented the development and evaluation of a polynomial model for estimating the noise figure of Erbium-Doped Fiber Amplifiers (EDFAs). The model leverages ...

In this paper, a simulation of an EDFA has been studied to characterize Gain, Noise Figure of a forward pumped EDFA operating in C band (1525-1565 nm) as functions of Er+3 fiber length, injected pump ...

EXPERIMENT guration for the measurement of gain, NF and nsp is shown in Figure 1. The amplifier consisted of 11 metres of erbium-doped germano-si icate fibre with ends terminated so as to provide ...

Abstract: Characteristics of noise in erbium doped fiber amplifier (EDFA) are theoretically analyzed and experimentally verified. Four discreet energy models are used for erbium ion transition.

Analysis of Gain and Noise in Erbium doped fiber - This lesson demonstrates the performance of an amplifier (gain and noise) based on Giles and Desurvire reference.

Noise figure characteristics of erbium-doped fibre amplifiers (EDFAs) with different optical feedback directions, namely counter- and co-feedback, and without feedback are presented.

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