Abstract

In this paper two configurations single and double stage with double pass technique are used with new flattening technique. The “Optisystem version 13.0” software package is used for simulation process. By using single stage EDFA with double pass technique the gain ripple enhanced from $34.56 \pm 2.8$ to $35.21 \pm 0.43$ dB with using flattening technique between the first and second passes, but it has high noise figure $5.98 \pm 1.12$ dB. The gain in the double stage EDFA with double pass technique is improved from $33.67 \pm 3$ to $34.60 \pm 0.56$ dB with using mid stage flattening technique and the noise figure of it is $3.94 \pm 0.3$ dB.

References


Index Terms

Computer Science Circuits and Systems

Keywords

EDFA, single stage, double stage, double pass, gain flatting, gain ripple