

MODELING OF MESFET WITH UNIFORM ACTIVE REGION UNDER ILLUMINATION FOR OPTOELECTRONICS APPLICATION

LOCHAN JOLLY AND B. K. MISHRA

Abstract

The paper is the theoretical detailed investigations of MESFET with uniform channel doping as photodetectors which has emerged as fast, reliable and low noise device for optoelectronics applications. A theoretical model has been developed to examine the effect of illumination on frequency response of the device. The results of the study show that there is increase in current with increase in illumination under A.C. and D.C. conditions.

Keyword : Optoelectronics, Photodetectors, Photovoltage, Schottky Junction