Abstracts

High-power waveguide integrated photodiode with distributed absorption

H. Jiang and P.K.L. Yu. "High-power waveguide integrated photodiode with distributed absorption." 2000 MTT-S International Microwave Symposium Digest 00.2 (2000 Vol. II [MWSYM]): 679-682.

A novel implementation of a vertically coupled, 1.3 /spl mu/m wavelength waveguide integrated InGaAs photodiode with distributed absorption is proposed using an index matching layer that can improve optical saturation power, responsivity and bandwidth. Waveguide photodiode made with this design shows a RF 1-dB compression point up to 10.2 mA at 20 GHz with CW optical power. Furthermore, the device has a 47 GHz 3-dB bandwidth, and 0.4 A/W microwave responsivity at 20 GHz without anti-reflection coating.

❑ Return to main document.