

Measurement of Intermodulation Distortion in Optical Diodes

B. Kanack. "Measurement of Intermodulation Distortion in Optical Diodes." 1995 MTT-S International Microwave Symposium Digest 95.1 (1995 Vol. I [MWSYM]): 61-64.

A measurement technique has been developed to directly determine the output two-tone, third-order intercept of microwave frequency p-i-n optical detector diodes. This method has been used to determine the bias dependence and frequency dependence of output third-order intercept for a p-i-n diode. It has been found that the third-order intercept increases monotonically with increasing reverse bias and decreases with increasing frequency. The maximum measurable output third-order intercept for a p-i-n diode has been found to be in excess 10 dBm at 2 GHz.

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