

Submillimeter Heterodyne Detection with Planar GaAs Schottky-Barrier Diodes

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Planar surface-oriented Pt/GaAs Schottky-barrier diodes have been fabricated and used to detect signals at submillimeter wavelengths. Video detection has been observed up to frequencies as high as 890 GHz. Harmonic mixing between the ninth harmonic of a 74.21-GHz signal and the second harmonic of 333.95-GHz radiation has also been obtained.

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