**Noise Gneration in the Single-Frequency Millimetr Wavelength Avalanche Tranzit Diode Generator Under the Effect of the Low Friquency Harmonic Ociillation**

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**Abstract:**

Experimentally studied changes in the spectrum of the single-frequency oscillation avalanche-transit diode generator for 7mm waveband and a signal output from the amplitude detector under the effect of the harmonic low frequency oscillations which supplied on the diode feed circuit. It is shown that amplitude increasing of low frequency oscillations when the operating point put on the diode volt-ampere characteristic, as a near starting current, both more it and below it, leads to a change in the shape of a harmonic amplitude modulation and, as a consequence, to the generation of noise in this generator.

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