

Abstracts

GaAs Gunn Oscillators Reach the 140 GHz Range

H. Barth and W. Menzel. "GaAs Gunn Oscillators Reach the 140 GHz Range." 1985 MTT-S International Microwave Symposium Digest 85.1 (1985 [MWSYM]): 367-369.

Design and performance of an 135 GHz, 3rd harmonic oscillator utilizing a 45 GHz Ga As-Gunn device is described. The nonlinear capacitance of the Gunn-device is used for frequency triplication. Hence an idler circuit for the 2nd harmonic wave is built in. This raises the efficiency of fundamental wave to 3rd harmonic wave conversion considerably. Output power was measured as 3 mW.

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