

Abstracts

A GaAs Single Chip 2.4 GHz PLL Frequency Multiplier

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A monolithic GaAs frequency synthesizer/ multiplier for the 2.4 GHz ISM band is presented. The single chip device consists of a VCO, a prescaler $\div 16$, a phase detector and a loop filter. Measured phase noise is -102 dBc/Hz at 100 kHz offset while the frequency of operation covers 2.3 GHz to 2.55 GHz. The device runs from a single 5 V supply and delivers +3 dBm of RF output power. The chip was mounted in a plastic package and a ready to use demonstrator board was designed.

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