

Fully Monolithic Ku and Ka-Band GaInP/GaAs HBT Wideband VCOs (1994 Vol. I [MWSYM])

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A family of fully monolithic VCOs utilizing GaInP/GaAs HBTs are presented for the first time. They operate at 14GHz and 28GHz with tuning bandwidths ranging from 10.7% to 19.6%. Output powers vary between -9dBm and +3dBm with an integrated 6dB attenuator to reduce pulling. The fabrication yield is higher than 50%. On-wafer measurements show a very small dispersion, and good agreement with the small signal simulations.

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