

# Abstracts

## Low jitter silicon bipolar based VCOs for applications in high speed optical communication systems

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*A.P.S. Khanna, E. Topacio, E. Gane and D. Elad. "Low jitter silicon bipolar based VCOs for applications in high speed optical communication systems." 2001 MTT-S International Microwave Symposium Digest 01.3 (2001 Vol. III [MWSYM]): 1567-1570 vol.3.*

This paper describes the design of silicon bipolar-based planar microstrip low noise VCO at 10 GHz. Using this VCO with GaAs PHEMT MMIC frequency multipliers, 20 GHz and 40 GHz VCOs are reported. Applications include OC-192 and OC-768 optical communication systems. Demonstrated phase noise of -113 dBc/Hz@100 KHz represents the best phase noise of a 10 GHz microstrip VCO reported to date.

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