

Abstracts

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

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.

 [Return to main document.](#)